## DESIGN DESIGNATION

I-29
A.A.D.T. - 2025 = NB-25477, SB-29357
A.A.D.T. - 2045 = NB-30572, SB-35228
D.H.V. = 1919
T = 28%
V = 70 M.P.H.

US-169
A.A.D.T. - 2025 = NB-19563, SB-22075
A.A.D.T. - 2045 = NB-24453, SB-27593
D.H.V. = 1457
T = 39%
V = 60 M.P.H.

NO NEW RIGHT OF WAY WILL
BE ACQUIRED FOR THIS PROJECT

## CONVENTIONAL SYMBOLS
(USED IN PLANS)

| | EXISTING | NEW |
|---|---|---|
| BUILDINGS AND STRUCTURES | | |
| GUARD RAIL | | |
| GUARD CABLE | | |
| CONCRETE RIGHT-OF-WAY MARKER | | |
| STEEL RIGHT-OF-WAY MARKER | | |
| LOCATION SURVEY MARKER | | |
| UTILITIES | | |
| FIBER OPTICS | -FO- | FO |
| OVERHEAD CABLE TV | -OTV- | OTV |
| UNDERGROUND CABLE TV | -UTV- | UTV |
| OVERHEAD TELEPHONE | -OT- | OT |
| UNDERGROUND TELEPHONE | -UT- | UT |
| OVERHEAD POWER | -OE- | OE |
| UNDERGROUND POWER | -UE- | UE |
| SANITARY SEWER | -S- | S |
| STORM SEWER | -SS- | SS |
| GAS | -G- | G |
| WATER | -W- | W |
| MANHOLE | SAN | |
| FIRE HYDRANT | HYD | |
| WATER VALVE | WV | |
| WATER METER | WM | |
| DROP INLET | D | |
| DITCH BLOCK | | |
| GROUND MOUNTED SIGN | SIGN | |
| LIGHT POLE | | |
| H-FRAME POWER POLE | | |
| TELEPHONE PEDESTAL | PED | |
| FENCE | | |
| CHAIN LINK | -V- | |
| WOVEN WIRE | -X- | |
| GATE POST | | |
| BENCHMARK | BM | |

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

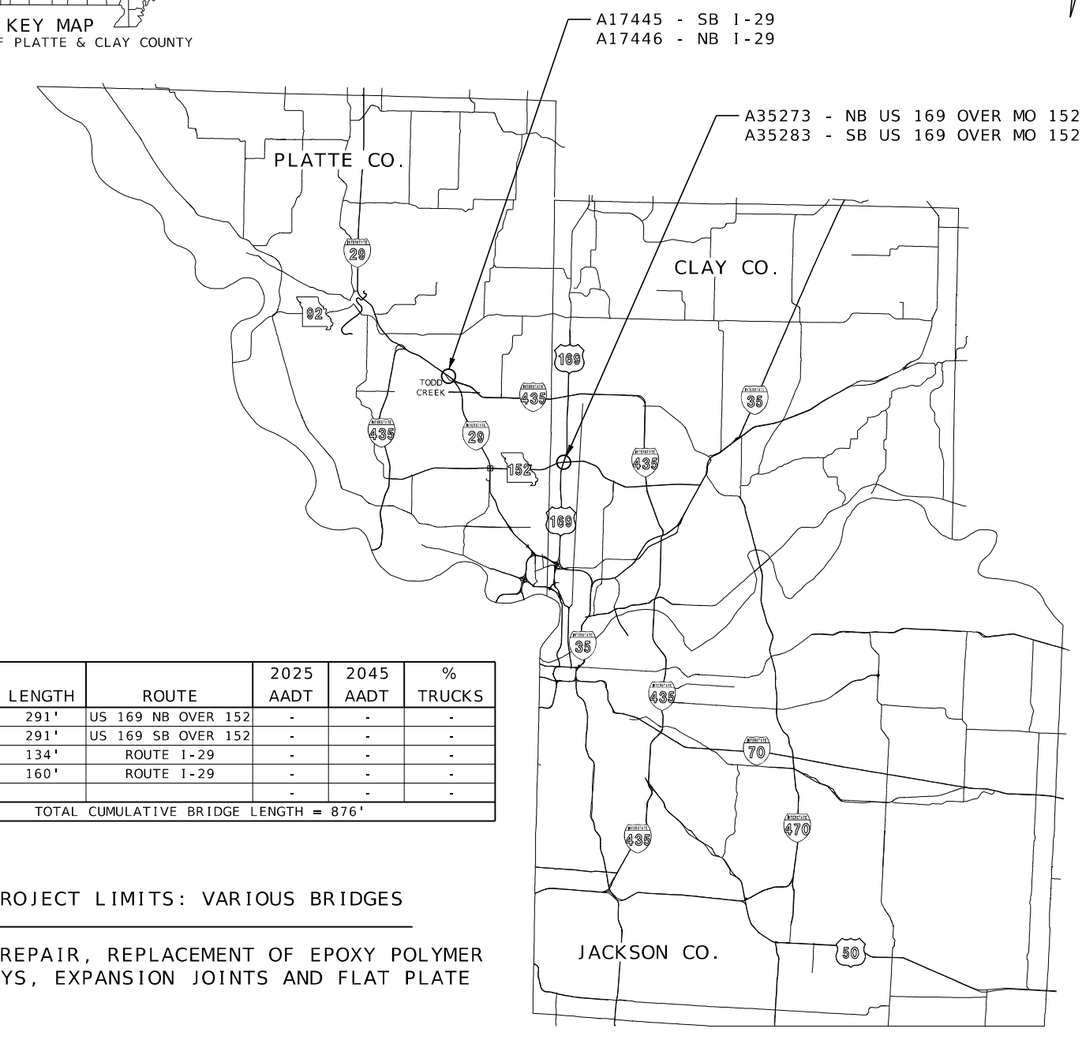
# MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

# PLANS FOR PROPOSED STATE HIGHWAY

# PLATTE AND CLAY COUNTIES



KEY MAP
LOCATION OF PLATTE & CLAY COUNTY




| BR. NO. | LENGTH | ROUTE | 2025 AADT | 2045 AADT | % TRUCKS |
|---|---|---|---|---|---|
| A3527 | 291' | US 169 NB OVER 152 | - | - | - |
| A3528 | 291' | US 169 SB OVER 152 | - | - | - |
| A1744(NB) | 134' | ROUTE I-29 | - | - | - |
| A1744(SB) | 160' | ROUTE I-29 | - | - | - |
| | | | - | - | - |
| TOTAL CUMULATIVE BRIDGE LENGTH = 876' | | | | | |

PROJECT LIMITS: VARIOUS BRIDGES

BRIDGE REPAIR, REPLACEMENT OF EPOXY POLYMER OVERLAYS, EXPANSION JOINTS AND FLAT PLATE

NOT TO SCALE

THE EXISTENCE AND APPROXIMATE LOCATION OF UTILITY FACILITIES KNOWN TO EXIST, AS SHOWN ON THE PLANS, ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE. RELIANCE UPON THIS INFORMATION IS DONE AT THE RISK AND PERIL OF THE USER, AND THE COMMISSION SHALL NOT BE LIABLE FOR ANY DAMAGES THAT MAY ARISE FROM ANY ERROR IN THE INFORMATION. IT IS, THEREFORE, THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND STATUS OF ANY FACILITY. SUCH VERIFICATION INCLUDES DIRECT CONTACT WITH THE LISTED UTILITIES.

## INDEX OF SHEETS


| DESCRIPTION | SHEET NUMBER |
|---|---|
| TITLE SHEET (2 SHEETS) | 1 |
| TYPICAL SECTIONS (TS) (2 SHEETS) | 2 |
| QUANTITIES (QU) (6 SHEETS) | 3 |
| PLAN SHEETS (7 SHEETS) | 4-10 |
| TRAFFIC CONTROL SHEETS (TC) | 11-78 |
| BRIDGE DRAWINGS (B) | |
| A17445 | 1 |
| A17446 | 1 |
| A35273 | 1 |
| A35283 | 1 |
| A52601 | 1-4 |
| A53131 | 1-5 |
| A63331 | 1-4 |
| A63341 | 1-4 |
| A63351 | 1-4 |


## LENGTH OF PROJECT

| | |
|---|---|
| BEGINNING OF PROJECT | VARIES |
| END OF PROJECT | VARIES |
| APPARENT LENGTH (AS INDICATED IN THIS SHEET) | 876.00 FEET |
| EQUATIONS AND EXCEPTIONS: | |
| TOTAL CORRECTIONS | 0 FEET |
| NET LENGTH OF PROJECT | 876.00 FEET |
| STATE LENGTH | 0.166 MILES |
| FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES | 0 ACRES |


STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/05/26 12:18 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056


DATE PREPARED: 3/3/2026
ROUTE: VAR. | STATE: MO
DISTRICT: KC | SHEET NO.: 1
COUNTY: VARIOUS
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

| REV. | DATE | DESCRIPTION |
|---|---|---|
| | | |


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

# MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
# PLANS FOR PROPOSED
# STATE HIGHWAY
# JACKSON AND PLATTE COUNTY



KEY MAP
LOCATION OF JACKSON AND PLATTE COUNTY

## DESIGN DESIGNATION

A5260
A.A.D.T. - 2024 = 6,862
A.A.D.T. - 2044 = 13,038
D.H.V. = x%
T = 9%
V = 45 M.P.H.
D = 55%
FUNCTIONAL CLASSIFICATION- URBAN PRINCIPLE ARTERIAL

A5313
A.A.D.T. - 2024 = 9,811
A.A.D.T. - 2044 = 13,245
D.H.V. = x%
T = 11%
V = 35 M.P.H.
D = 55%
FUNCTIONAL CLASSIFICATION- URBAN MINOR ARTERIAL

A6333
A.A.D.T. - 2024 = 37,145
A.A.D.T. - 2044 =
D.H.V. = x%
T = 12%
V = 55 M.P.H.
D = 100%
FUNCTIONAL CLASSIFICATION- URBAN PRINCIPLE ARTERIAL

A6334
A.A.D.T. - 2024 = 28,665
A.A.D.T. - 2044 =
D.H.V. = x%
T = 5%
V = 55 M.P.H.
D = 55%
FUNCTIONAL CLASSIFICATION- URBAN OTHER PRINCIPLE ARTERIAL

A6335
A.A.D.T. - 2024 = 35,857
A.A.D.T. - 2044 =
D.H.V. = x%
T = 12%
V = 55 M.P.H.
D = 100%
FUNCTIONAL CLASSIFICATION- URBAN PRINCIPLE ARTERIAL

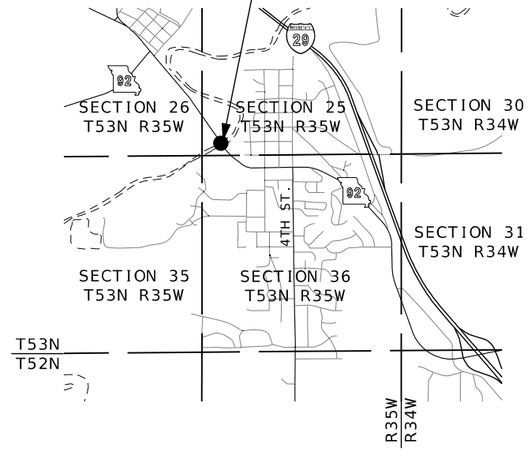
NO RIGHT-OF-WAY TO BE ACQUIRED

## CONVENTIONAL SYMBOLS
(USED IN PLANS)

| | EXISTING | NEW |
|---|---|---|
| BUILDINGS AND STRUCTURES | | |
| GUARD RAIL | | |
| GUARD CABLE | | |
| CONCRETE RIGHT-OF-WAY MARKER | | |
| STEEL RIGHT-OF-WAY MARKER | | |
| LOCATION SURVEY MARKER | | |
| UTILITIES | | |
| FIBER OPTICS | -FO- | FO |
| OVERHEAD CABLE TV | -OTV- | OTV |
| UNDERGROUND CABLE TV | -UTV- | UTV |
| OVERHEAD TELEPHONE | -OT- | OT |
| UNDERGROUND TELEPHONE | -UT- | UT |
| OVERHEAD POWER | -OE- | OE |
| UNDERGROUND POWER | -UE- | UE |
| SANITARY SEWER | -S- | S |
| STORM SEWER | -SS- | SS |
| GAS | -G- | G |
| WATER | -W- | W |
| MANHOLE | SAN | |
| FIRE HYDRANT | HYD | |
| WATER VALVE | WV | |
| WATER METER | WM | |
| DROP INLET | D | |
| DITCH BLOCK | | |
| GROUND MOUNTED SIGN | SIGN | |
| LIGHT POLE | | |
| H-FRAME POWER POLE | | |
| TELEPHONE PEDESTAL | PED | |
| FENCE | | |
| CHAIN LINK | -V- | |
| WOVEN WIRE | -X- | |
| GATE POST | | |
| BENCHMARK | BM | |

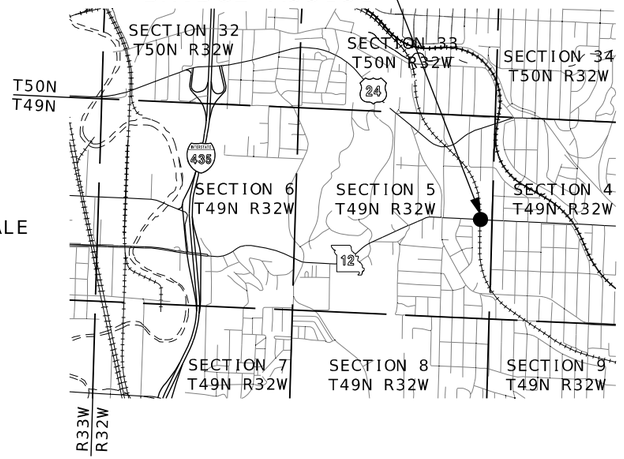
NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

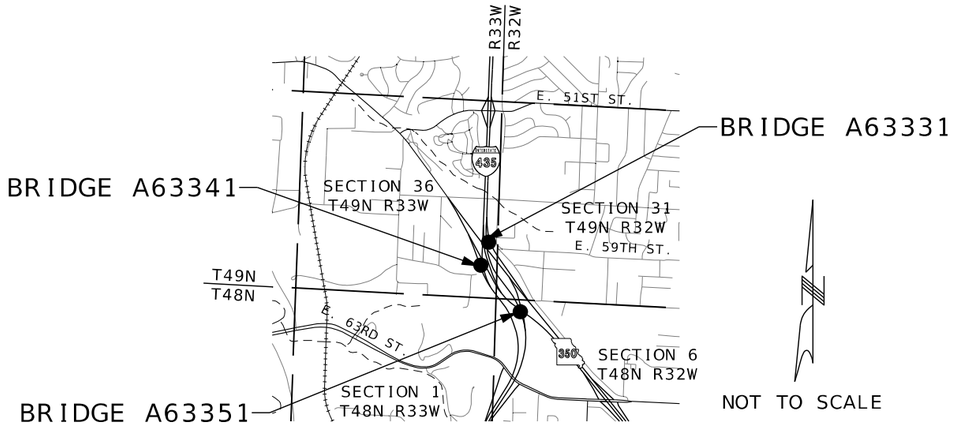
BRIDGE A52601




NOT TO SCALE

BRIDGE A53131




NOT TO SCALE

THE EXISTENCE AND APPROXIMATE LOCATION OF UTILITY FACILITIES KNOWN TO EXIST, AS SHOWN ON THE PLANS, ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE. RELIANCE UPON THIS INFORMATION IS DONE AT THE RISK AND PERIL OF THE USER, AND THE COMMISSION SHALL NOT BE LIABLE FOR ANY DAMAGES THAT MAY ARISE FROM ANY ERROR IN THE INFORMATION. IT IS, THEREFORE, THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND STATUS OF ANY FACILITY. SUCH VERIFICATION INCLUDES DIRECT CONTACT WITH THE LISTED UTILITIES.

STATE OF MISSOURI
CURTIS M. HUMPHREY
NUMBER PE-2009027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
3/4/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 1 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

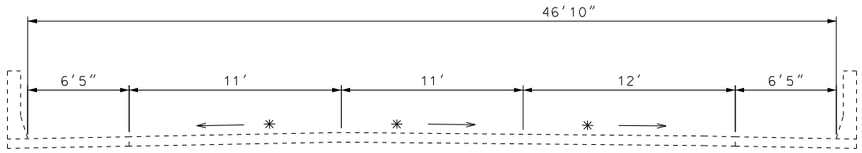
PROJECT NO.

BRIDGE NO.

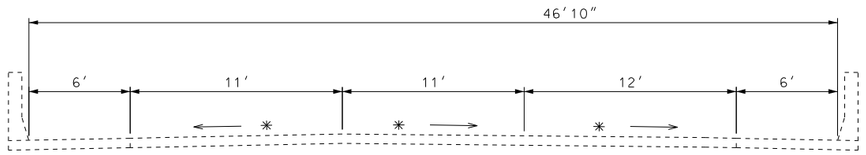
| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

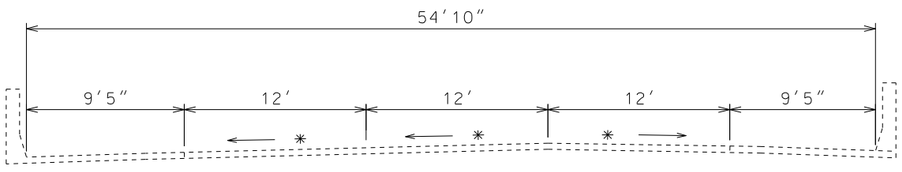
TRANSYSTEMS
2400 PERSHING ROAD, SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)328-8601
MO STATE CERT. OF AUTHORITY # 273. ENGINEERING



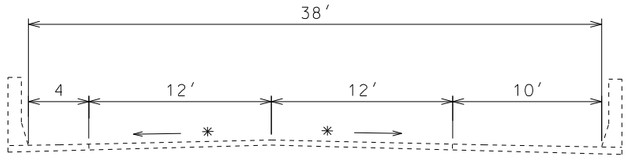

BRIDGE A35273
NB LOG MILE 11.86 TO LOG MILE 11.915




BRIDGE A35283
SB LOG MILE 114.99 TO LOG MILE 115.045




BRIDGE A17446 (NB)
NB LOG MILE 18.87 TO LOG MILE 18.896




BRIDGE A17445 (SB)
SB LOG MILE 109.853 TO LOG MILE 109.883

* MATCH EXISTING SLOPE
NOT TO SCALE

TYPICAL SECTION
SHEET 1 OF 2

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/09/26 1:11:43 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 2 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

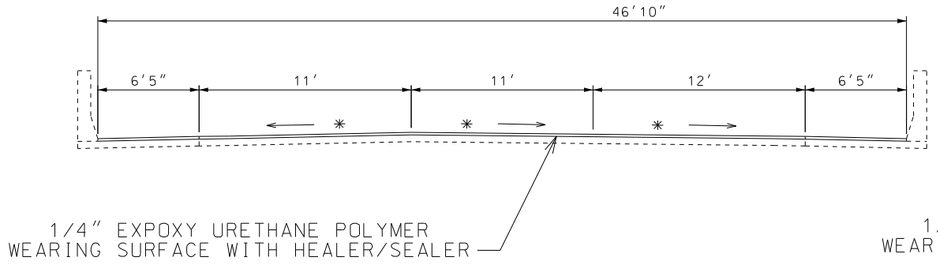
BRIDGE NO.

| DESCRIPTION | DATE | REV. |
|---|---|---|
| | | |

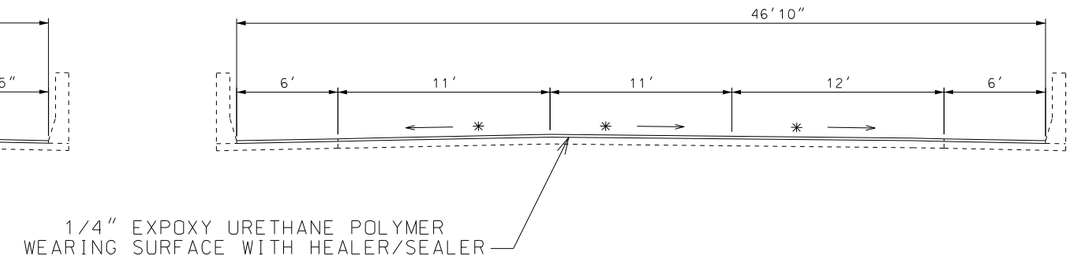
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

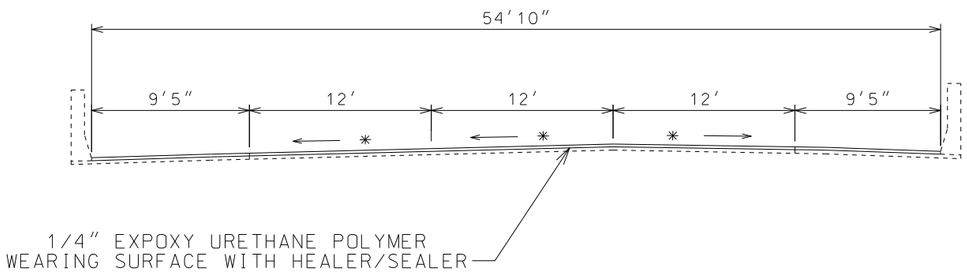
002_TS_01_J4P3093_I1.dgn 9:53:53 AM 2/27/2026



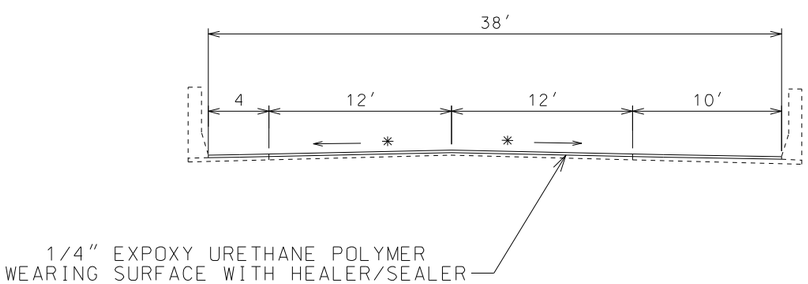

BRIDGE A35273
NB LOG MILE 11.86 TO LOG MILE 11.915




BRIDGE A35283
SB LOG MILE 114.99 TO LOG MILE 115.045




BRIDGE A17446 (NB)
NB LOG MILE 18.87 TO LOG MILE 18.896




BRIDGE A17445 (SB)
SB LOG MILE 109.853 TO LOG MILE 109.883

NOTE:
SEE BRIDGE DRAWINGS SHEETS
FOR FURTHER DETAIL

TYPICAL SECTION
SHEET 2 OF 2

* MATCH EXISTING SLOPE
NOT TO SCALE

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 3:31 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED 2/27/2026 | |
| ROUTE VAR | STATE MO |
| DISTRICT KC | SHEET NO. 2 |
| COUNTY VARIOUS | |
| JOB NO. J4P3093 | |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

002_TS_02_J4P3093_I1.dgn 9:55:24 AM 2/27/2026

| MOBILIZATION |
|---|
| PAY TOTAL = 1 LUMP SUM |

| CONTRACTOR FURNISHED SURVEYING & STAKING |
|---|
| PAY TOTAL = 1 LUMP SUM |

| REMOVAL OF IMPROVEMENTS | | |
|---|---|---|
| LOCATION OR LOG MILE | ITEM | QUANTITY |
| I-29 (NB/SB) AND MO-169 (NB/SB) | GUARDRAIL | 2070 LF |
| MO-169 (NB/SB) | PAVED DITCH | 110 LF |
| I-29 (NB/SB) AND MO-169 (NB/SB) | SAW CUTS | 300 LF |
| I-29 (NB/SB) | SIGNS (SALVAGE) | 2 EA |
| TOTAL | 1 | LUMP SUM |

GUARDRAIL

| BEGIN ± LOG | END ± LOG | LOCATION | MGS GUARDRAIL (LF) | GUARDRAIL TYPE A (LF) | BRIDGE ANCHOR SECTION (EA) | TRANSITION SECTION (EA) | (MASH) TYPE A CRASHWORTHY END TERMINAL (EA) | TYPE A CRASHWORTHY END TERMINAL (EA) | END ANCHOR (EA) | MGS END ANCHOR (EA) | GUARD CABLE ANCHOR (EA) | MGS VERTICAL CONC. BARRIER TRANS. (EA) | CONC. TRAFFIC BARRIER TYPE B (LF) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.838 | 18.869 | I-29 | | 284.25 | 1 | 1 | | 1 | | | | | | NB UPSTREAM RIGHT SHLDR |
| 18.838 | 18.869 | I-29 | | 284.25 | 1 | 1 | | 1 | | | | | | NB UPSTREAM LEFT SHLDR |
| 18.897 | 18.924 | I-29 | | 159.25 | 1 | 1 | | | 1 | | | | | NB DOWNSTREAM RIGHT SHLDR |
| 18.897 | 18.906 | I-29 | | | 1 | | | | | | | | | NB DOWNSTREAM LEFT SHLDR |
| 109.799 | 109.852 | I-29 | | 334.25 | 1 | 1 | | 1 | | | | | | SB UPSTREAM LEFT SHLDR |
| 109.808 | 109.853 | I-29 | | 271.25 | 1 | 1 | | 1 | | | | | | SB UPSTREAM RIGHT SHLDR |
| 109.88 | 109.906 | I-29 | | 146.75 | 1 | 1 | | | 1 | | | | | SB DOWNSTREAM LEFT SHLDR |
| 11.732 | 11.862 | MO-169 | | 471.75 | 1 | 1 | | 1 | | | | | | NB UPSTREAM LEFT SHLDR |
| 11.82 | 11.862 | MO-169 | | 184.25 | 1 | 1 | | 1 | | | | | | NB UPSTREAM RIGHT SHLDR |
| 11.91 | 11.951 | MO-169 | | 234.25 | 1 | 1 | | | 1 | | | | | NB DOWNSTREAM RIGHT SHLDR |
| 114.923 | 114.991 | MO-169 | | 484.25 | 1 | 1 | | 1 | | | | | | SB UPSTREAM LEFT SHLDR |
| 114.958 | 114.991 | MO-169 | | 259.25 | 1 | 1 | | 1 | | | | | | SB UPSTREAM RIGHT SHLDR |
| | | TOTAL | 0 | 3113.75 | 12 | 11 | 0 | 8 | 3 | 0 | 0 | 0 | 0 | |

TYPE 2 ROCK BLANKET

| BEGIN ± LOG | END ± LOG | LOCATION | AREA (SF) | DEPTH (SF) | FURNISHING TYPE 2 ROCK BLANKET (CY) | PLACING TYPE 2 ROCK BLANKET (CY) | PERMAMENT EROSION CONTROL GEOTEXTILE (SY) | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 11.919 | 11.926 | MO-169 | 422.0 | 3 | 47 | 47 | 47 | NB DOWNSTREAM LEFT SHLDR |
| 11.908 | 11.919 | MO-169 | 422.0 | 3 | 47 | 47 | 47 | NB DOWNSTREAM RIGHT SHLDR |
| 4.966 | 4.977 | MO-169 | 422.0 | 3 | 47 | 47 | 47 | SOUTHBOUND UPSTREAM LEFT SHLDR |
| 4.966 | 4.977 | MO-169 | 422.0 | 3 | 47 | 47 | 47 | SOUTHBOUND UPSTREAM RIGHT SHLDR |
| | | | | TOTAL | 188 | 188 | 188 | |

SUMMARY OF QUANTITIES
SHEET 1 OF 6

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 12:10:08 PM
THANKAM.MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 3 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

| EARTHWORK | | | | | |
|---|---|---|---|---|---|
| BEGIN ±LOG | END ±LOG | LOCATION | EMBANKMENT IN PLACE (CY) | SHAPING SLOPES CLASS III (STA) | REMARKS |
| 11.732 | 11.862 | MO-169 | 314.50 | 4.718 | NB UPSTREAM LEFT SHLDR |
| 11.82 | 11.862 | MO-169 | 122.83 | 1.843 | NB UPSTREAM RIGHT SHLDR |
| 11.91 | 11.951 | MO-169 | 156.17 | 2.343 | NB DOWNSTREAM RIGHT SHLDR |
| 114.923 | 114.991 | MO-169 | 322.83 | 4.843 | SB UPSTREAM LEFT SHLDR |
| 114.958 | 114.991 | MO-169 | 172.83 | 2.593 | SB UPSTREAM RIGHT SHLDR |
| | | TOTAL | 1089 | 16 | |

| TEMPORARY EROSION CONTROL | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BEGIN ±LOG | END ±LOG | LOCATION | ALTERNATE DITCH CHECK (LF) | SEDIMENT TRAP (CY) | TYPE 1A E.C. BLANKET (SY) | SEDIMENT REMOVAL (CY) | SILT FENCE (LF) | REMARKS |
| 11.869 | 11.869 | MO-169 | 38.78 | | | | | NB UPSTREAM DITCH NO INTERVALS |
| 11.908 | 11.908 | MO-169 | 288.71 | | | | | NB DOWNSTREAM/SB UPSTREAM DITCH NO INTERVAL |
| | | TOTAL | 327 | 0 | 0 | 0 | 0 | |

| PAVEMENT MARKING | | | | | |
|---|---|---|---|---|---|
| BEGIN ±LOG | END ±LOG | LOCATION | 6" YELLOW SOLID TYPE L BEADS (FT) | 6" WHITE SOLID TYPE L BEADS (FT) | REMARKS |
| 18.87 | 18.907 | I-29 | 230 | 900 | NB |
| 109.843 | 109.888 | I-29 | 230 | 1720 | SB |
| 11.857 | 11.927 | MO-169 | 380 | 2140 | NB |
| 114.991 | 115.052 | MO-169 | 385 | 2155 | SB |
| | | TOTAL | 1225 | 6915 | |

| TEMP PAVEMENT MARKING | | | | |
|---|---|---|---|---|
| BEGIN ±LOG | END ±LOG | LOCATION | 4" WHITE TEMPORARY PAVEMENT (FT) | REMARKS |
| 18.788 | 18.916 | I-29 | 840 | NB PHASE 1 |
| 18.788 | 18.916 | I-29 | 1440 | NB PHASE 2 |
| 109.666 | 109.89 | I-29 | 3600 | SB PHASE 1, 2 |
| 114.965 | 115.063 | MO-169 | 1744 | SB PHASE 1 |
| 11.824 | 11.927 | MO-169 | 1752 | NB PHASE 1 |
| 11.824 | 11.927 | MO-169 | 2708 | NB PHASE 2 |
| 114.965 | 115.063 | MO-169 | 2708 | SB PHASE 2 |
| | | TOTAL | 14792 | |

SUMMARY OF QUANTITIES
SHEET 2 OF 6

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 2:47:30 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED 2/27/2026
ROUTE VAR
STATE MO
DISTRICT KC
SHEET NO. 3
COUNTY VARIOUS
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

003_QU_01_to_02_J3S3162.dgn 9:56:47 AM 2/27/2026

EFFECTIVE: 04-01-2023

| SIGN | SIZE IN. | AREA SQ.FT. | QTY EACH | TOTAL AREA SQ.FT. | QTY RELOC EACH | TOTAL RELOC SQ.FT. | SIGN NUM. | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| WARNING SIGNS | | | | | | | | |
| WO1-1L | 48X48 | 16.00 | | | | | | TURN (SYMBOL LEFT ARROW) |
| WO1-1R | 48X48 | 16.00 | | | | | | TURN (SYMBOL RIGHT ARROW) |
| WO1-2L | 48X48 | 16.00 | | | | | | CURVE (SYMBOL LEFT ARROW) |
| WO1-2R | 48X48 | 16.00 | | | | | | CURVE (SYMBOL RIGHT ARROW) |
| WO1-3L | 48X48 | 16.00 | | | | | | REVERSE TURN (SYMBOL LEFT ARROW) |
| WO1-3R | 48X48 | 16.00 | | | | | | REVERSE TURN (SYMBOL RIGHT ARROW) |
| WO1-4L | 48X48 | 16.00 | | | | | | REVERSE CURVE (SYMBOL LEFT ARROW) |
| WO1-4R | 48X48 | 16.00 | | | | | | REVERSE CURVE (SYMBOL RIGHT ARROW) |
| WO1-4bL | 48X48 | 16.00 | 4 | 64.00 | | | 32R | DOUBLE ARROW REVERSE CURVE (SYMBOL LT ARROWS) |
| WO1-4bR | 48X48 | 16.00 | 4 | 64.00 | | | 32L | DOUBLE ARROW REVERSE CURVE (SYMBOL RT ARROWS) |
| WO1-4cL | 48X48 | 16.00 | | | | | | TRIPLE ARROW REVERSE CURVE (SYMBOL LT ARROWS) |
| WO1-4cR | 48X48 | 16.00 | | | | | | TRIPLE ARROW REVERSE CURVE (SYMBOL RT ARROWS) |
| WO1-6 | 60X30 | 12.50 | | | | | | HORIZONTAL ARROW (SYMBOL) |
| WO1-6a | 72X36 | 18.00 | | | | | | HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE) |
| WO1-7 | 60X30 | 12.50 | | | | | | DOUBLE HEAD HORIZONTAL ARROW (SYMBOL) |
| WO1-7a | 72X36 | 18.00 | | | | | | DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.) |
| WO1-8 | 18X24 | 3.00 | | | | | | CHEVRON (SYMBOL) |
| WO1-8a | 30X36 | 7.50 | | | | | | CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS) |
| WO3-1 | 48X48 | 16.00 | | | | | | STOP AHEAD (SYMBOL) |
| WO3-2 | 48X48 | 16.00 | 2 | 32.00 | | | 40 | YIELD AHEAD (SYMBOL) |
| WO3-3 | 48X48 | 16.00 | | | | | | SIGNAL AHEAD (SYMBOL) |
| WO3-4 | 48X48 | 16.00 | | | | | | BE PREPARED TO STOP |
| WO3-5 | 48X48 | 16.00 | | | | | | SPEED LIMIT AHEAD |
| WO4-1L | 48X48 | 16.00 | | | | | | MERGE (SYMBOL FROM LEFT) |
| WO4-1R | 48X48 | 16.00 | 2 | 32.00 | | | 19 | MERGE (SYMBOL FROM RIGHT) |
| WO4-1aL | 48X48 | 16.00 | 4 | 64.00 | | | 6A | MERGE (ARROW SYMBOL) |
| WO4-1aR | 48X48 | 16.00 | 4 | 64.00 | | | 6B | MERGE (ARROW SYMBOL) |
| WO5-1 | 48X48 | 16.00 | 8 | 128.00 | | | 43 | ROAD/BRIDGE/RAMP NARROWS |
| WO5-3 | 48X48 | 16.00 | | | | | | ONE LANE BRIDGE |
| WO5-5 | 48X48 | 16.00 | | | | | | NARROW LANES |
| WO6-1 | 48X48 | 16.00 | | | | | | DIVIDED HIGHWAY (SYMBOL) |
| WO6-2 | 48X48 | 16.00 | | | | | | DIVIDED HIGHWAY END (SYMBOL) |
| WO6-3 | 48X48 | 16.00 | | | | | | TWO WAY TRAFFIC (SYMBOL) |
| WO7-3a | 30X24 | 5.00 | | | | | | NEXT XX MILES (PLAQUE) |
| WO8-1 | 48X48 | 16.00 | | | | | | BUMP |
| WO8-2 | 48X48 | 16.00 | | | | | | DIP |
| WO8-3 | 48X48 | 16.00 | | | | | | PAVEMENT ENDS |
| WO8-4 | 48X48 | 16.00 | | | | | | SOFT SHOULDER |
| WO8-5 | 48X48 | 16.00 | | | | | | SLIPPERY WHEN WET (SYMBOL) |
| WO8-6 | 48X48 | 16.00 | | | | | | TRUCK CROSSING (WITH FLAGS) |
| WO8-6c | 48X48 | 16.00 | | | | | | TRUCK ENTRANCE |
| WO8-7 | 36X36 | 9.00 | | | | | | LOOSE GRAVEL |
| WO8-7a | 36X36 | 9.00 | | | | | | FRESH OIL/LOOSE GRAVEL |
| WO8-9 | 48X48 | 16.00 | | | | | | LOW SHOULDER |
| WO8-11 | 48X48 | 16.00 | | | | | | UNEVEN LANES |
| WO8-12 | 48X48 | 16.00 | | | | | | NO CENTER LINE |
| WO8-15 | 48X48 | 16.00 | | | | | | GROOVED PAVEMENT |
| WO8-15P | 30X24 | 5.00 | | | | | | MOTORCYCLE (PLAQUE) |
| WO8-17 | 48X48 | 16.00 | | | | | | SHOULDER DROP-OFF (SYMBOL) |
| WO8-17P | 30X24 | 5.00 | | | | | | SHOULDER DROP-OFF (PLAQUE) |
| W10-1 | 42RND. | 9.62 | | | | | | RAILROAD CROSSING |
| WO12-1 | 24X24 | 4.00 | | | | | | DOUBLE DOWN ARROW (SYMBOL) |
| WO12-2 | 48X48 | 16.00 | | | | | | LOW CLEARANCE (SYMBOL) |
| WO12-2X | 24X18 | 3.00 | | | | | | LOW CLEARANCE (PLAQUE) |
| WO12-2a | 84X24 | 14.00 | | | | | | OVERHEAD LOW CLEARANCE (FEET AND INCHES) |
| WO12-4 | 120X60 | 50.00 | | | | | | LOW CLEARANCE XX FT XX IN XX MILES AHEAD |
| WO12-5 | 120X60 | 50.00 | | | | | | WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD |
| WO13-1 | 30X30 | 6.25 | 3 | 18.75 | | | 44A | ADVISORY SPEED (PLAQUE) |
| WO16-2 | 30X24 | 5.00 | | | | | | XXX FEET (PLAQUE) |
| WO16-3 | 30X24 | 5.00 | | | | | | X MILE (PLAQUE) |
| WO20-1 | 48X48 | 16.00 | 12 | 192.00 | | | 2 | ROAD/BRIDGE/RAMP WORK AHEAD |
| WO20-2 | 48X48 | 16.00 | | | | | | DETOUR AHEAD |
| WO20-3 | 48X48 | 16.00 | | | | | | ROAD CLOSED AHEAD |
| WO20-4 | 48X48 | 16.00 | | | | | | ONE LANE ROAD AHEAD |
| WO20-5 | 48X48 | 16.00 | 9 | 144.00 | | | 5 | RIGHT/CENTER/LEFT LANE CLOSED AHEAD |
| WO20-5a | 48X48 | 16.00 | | | | | | 2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD |
| WO20-6a | 48X48 | 16.00 | 4 | 64.00 | | | 6 | RIGHT/CENTER/LEFT LANE CLOSED |
| WO20-7a | 48X48 | 16.00 | | | | | | FLAGGER (SYMBOL, WITH FLAGS) |
| WO21-2 | 36X36 | 9.00 | | | | | | FRESH OIL |
| WO21-5 | 48X48 | 16.00 | 4 | 64.00 | | | 21 | SHOULDER WORK AHEAD |
| WO22-1 | 48X48 | 16.00 | | | | | | BLASTING ZONE AHEAD |
| WO22-2 | 42X36 | 10.50 | | | | | | TURN OFF 2-WAY RADIO AND PHONE |
| WO22-3 | 42X36 | 10.50 | | | | | | END BLASTING ZONE |
| GO22-1 | 21X15 | 2.19 | | | | | | WET PAINT (ARROW PIVOTS) |

| SIGN | SIZE IN. | AREA SQ.FT. | QTY EACH | TOTAL SQ.FT. | QTY RELOC EACH | TOTAL RELOC SQ.FT. | SIGN NUM. | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| GUIDE SIGNS | | | | | | | | |
| E05-1 | 36X48 | 12.00 | | | | | | GORE EXIT |
| E05-2 | 48X36 | 12.00 | | | | | | EXIT OPEN |
| E05-2a | 48X36 | 12.00 | | | | | | EXIT CLOSED |
| GO20-1 | 60X24 | 10.00 | 4 | 40.00 | | | 1 | ROAD WORK NEXT XX MILES |
| GO20-2 | 48X24 | 8.00 | 4 | 32.00 | | | 26 | END ROAD WORK |
| GO20-4 | 36X18 | 4.50 | | | | | | PILOT CAR FOLLOW ME |
| GO20-4a | 42X30 | 8.75 | | | | | | PILOT CAR IN USE WAIT & FOLLOW |
| GO20-4a | 18X12 | 1.50 | | | | | | PILOT CAR IN USE WAIT & FOLLOW |
| GO20-5aP | 36X24 | 6.00 | | | | | | WORK ZONE (PLAQUE) |
| MO4-8a | 24X18 | 3.00 | | | | | | END DETOUR |
| MO4-9L | 48X36 | 12.00 | | | | | | DETOUR (LEFT ARROW) |
| MO4-9R | 48X36 | 12.00 | | | | | | DETOUR (RIGHT ARROW) |
| MO4-9P | 48X12 | 4.00 | | | | | | STREET NAME (PLAQUE) |
| MO4-10L | 48X18 | 6.00 | | | | | | DETOUR (ARROW LEFT) |
| MO4-10R | 48X18 | 6.00 | | | | | | DETOUR (ARROW RIGHT) |
| REGULATORY SIGNS | | | | | | | | |
| R1-1 | 48X48 | 13.25 | | | | | | STOP |
| R1-2 | 48TRI. | 6.93 | 4 | 27.72 | | | 13 | YIELD |
| R1-2a | 36X36 | 9.00 | | | | | | TO ONCOMING TRAFFIC (PLAQUE) |
| R1-3P | 30X12 | 2.50 | | | | | | ALL WAY (PLAQUE) |
| R2-1 | 36X48 | 12.00 | | | | | | SPEED LIMIT XX |
| R3-1 | 48X48 | 16.00 | | | | | | NO RIGHT TURN (SYMBOL) |
| R3-2 | 48X48 | 16.00 | | | | | | NO LEFT TURN (SYMBOL) |
| R3-3 | 36X36 | 9.00 | | | | | | NO TURNS |
| R3-4 | 48X48 | 16.00 | | | | | | NO U-TURN (SYMBOL) |
| R3-7L | 30X30 | 6.25 | | | | | | LEFT LANE MUST TURN LEFT |
| R3-7R | 30X30 | 6.25 | | | | | | RIGHT LANE MUST TURN RIGHT |
| R4-1 | 36X48 | 12.00 | | | | | | DO NOT PASS |
| R4-2 | 36X48 | 12.00 | | | | | | PASS WITH CARE |
| R4-8a | 36X48 | 12.00 | | | | | | KEEP LEFT (HORIZONTAL ARROW) |
| R4-7a | 36X48 | 12.00 | | | | | | KEEP RIGHT (HORIZONTAL ARROW) |
| R5-1 | 30X30 | 6.25 | | | | | | DO NOT ENTER |
| R5-1a | 36X24 | 6.00 | | | | | | WRONG WAY |
| R6-1L | 54X18 | 6.75 | | | | | | ONE WAY ARROW (LEFT) |
| R6-1R | 54X18 | 6.75 | | | | | | ONE WAY ARROW (RIGHT) |
| R6-2L | 24X30 | 5.00 | | | | | | ONE WAY (LEFT) |
| R6-2R | 24X30 | 5.00 | | | | | | ONE WAY (RIGHT) |
| R9-9 | 24X12 | 2.00 | | | | | | SIDEWALK CLOSED |
| R9-11L | 24X18 | 3.00 | | | | | | SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE |
| R9-11R | 24X18 | 3.00 | | | | | | SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE |
| R10-6 | 24X36 | 6.00 | | | | | | STOP HERE ON RED (45^ ARROW) |
| R11-2 | 48X30 | 10.00 | | | | | | ROAD CLOSED |
| R11-3a | 60X30 | 12.50 | | | | | | ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY |
| R11-4 | 60X30 | 12.50 | | | | | | ROAD CLOSED TO THRU TRAFFIC |
| CONST-3A | 60X48 | 20.00 | | | | | | FINE SIGN |
| CONST-3X | 56X12 | 4.67 | | | | | | SPEEDING/PASSING (PLATE) |
| MISCELLANEOUS SIGNS | | | | | | | | |
| CONST-5 | 48X36 | 12.00 | | | | | | POINT OF PRESENCE |
| CONST-5 | 96X48 | 32.00 | 4 | 120.00 | | | 57 | POINT OF PRESENCE |
| CONST-7 | 48X24 | 8.00 | | | | | | RATE OUR WORK ZONE |
| CONST-7 | 72X36 | 18.00 | | | | | | RATE OUR WORK ZONE |
| CONST-8 | 48X36 | 12.00 | 4 | 48.00 | | | 56 | WORK ZONE NO PHONE ZONE |
| WO13-1 | 30x30 | 6.25 | 5 | 31.25 | | | 44 | ADVISORY SPEED PLAQUE |
| WO21-5bR | 48x48 | 16.00 | 4 | 64.00 | | | 21B | RIGHT SHOULDER CLOSED AHEAD |
| WO21-5aR | 48x48 | 16.00 | 4 | 64.00 | | | 21A | RIGHT SHOULDER CLOSED |

| 616-10.05 CONSTRUCTION SIGNS | TOTAL |
|---|---|
| | 1358 |

| 616-10.10 RELOCATED SIGNS | TOTAL |
|---|---|
| | 0 |

| ITEM NUMBER | TOTAL QTY | DESCRIPTION |
|---|---|---|
| 6122008 | | IMPACT ATTENUATOR 40 MPH (SAND BARRELS) |
| 6122009 | | IMPACT ATTENUATOR 45 MPH (SAND BARRELS) |
| 6122010 | | IMPACT ATTENUATOR 50 MPH (SAND BARRELS) |
| 6122012 | | IMPACT ATTENUATOR 55 MPH (SAND BARRELS) |
| 6122014 | | IMPACT ATTENUATOR 60 MPH (SAND BARRELS) |
| 6122017 | | IMPACT ATTENUATOR 65 MPH (SAND BARRELS) |
| 6122019 | | IMPACT ATTENUATOR 70 MPH (SAND BARRELS) |
| 6122020 | | REPLACEMENT SAND BARREL |
| 6122030 | | IMPACT ATTENUATOR (RELOCATION) |
| 6123001 | | TRUCK OR TRAILER MOUNTED ATTENUATOR (TMA) |
| 6161008 | | ADVANCED WARNING RAIL SYSTEM |
| 6161012 | | BUOYS (BOATS KEEP OUT) |
| 6161013 | | BUOYS (NO WAKE) |
| 6161014 | | SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT) |
| 6161025 | 300 | CHANNELIZER (TRIM LINE) |
| 6161030 | | TYPE III MOVEABLE BARRICADE |
| 6161033 | | DIRECTION INDICATOR BARRICADE |
| 6161040 | 4 | FLASHING ARROW PANEL |
| 6161047 | | TYPE III OBJECT MARKER |
| 6161055 | | SEQUENTIAL FLASHING WARNING LIGHT |
| 6161070 | | TUBULAR MARKER |
| 6161095 | | RADAR SPEED ADVISORY SYSTEM |
| 6161096 | | CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED |
| 6161098A | | CHANGEABLE MESSAGE SIGN W/O COMM. INTERFACE - CONTRACTOR FURNISHED/RETAINED |
| 6161099 | 4 | CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE - CONTRACTOR FURNISHED/RETAINED |
| 6162000A | | WORK ZONE TRAFFIC SIGNAL SYSTEM |
| 6162002 | | TEMPORARY LONG-TERM RUMBLE STRIPS |
| 6173600D | 3140 | TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/RETAINED |
| 6173602B | | TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/COMMISSION RETAINED |
| 6174000A | | TEMP. TRAFFIC BARRIER HEIGHT TRANSITION |
| 6175010A | 3140 | RELOCATING TEMPORARY TRAFFIC BARRIER |
| 6176000B | | TEMPORARY TRAFFIC BARRIER COMMISSION FURNISHED/RETAINED |
| 6177000B | | TEMP. TRAFFIC BARRIER HEIGHT TRANSITION COMMISSION FURNISHED/RETAINED |
| 6208064A | | TEMPORARY RAISED PAVEMENT MARKER |
| 9029400 | | TEMPORARY TRAFFIC SIGNALS |
| 9029401 | | TEMPORARY TRAFFIC SIGNALS AND LIGHTING |
| 6122040 | 4 | WORK ZONE CRASH CUSHION (NARROW) |
| 6122041 | 4 | WORK ZONE CRASH CUSHION (NARROW)(RELOCATION) |

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 4:8 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED 2/27/2026

ROUTE VAR | STATE MO

DISTRICT KC | SHEET NO. 3

COUNTY VARIOUS

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE | REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SUMMARY OF QUANTITIES
SHEET 3 OF 6

003_QU_03_to_03_J3S3162.dgn 9:57:27 AM 2/27/2026

| REMOVAL OF IMPROVEMENTS | | | | | | |
|---|---|---|---|---|---|---|
| SHEET NO. | STATION | STATION | LOCATION | QUANTITY | UNIT | DESCRIPTION |
| A5260 | | | Route 92 NE | 137.5 | LF | GUARDRAIL |
| A5260 | | | Route 92 NW | 137.5 | LF | GUARDRAIL |
| A5260 | | | Route 92 SE | 137.5 | LF | GUARDRAIL |
| A5260 | | | Route 92 SW | 137.5 | LF | GUARDRAIL |
| A6333 | | | Route 350 WB NE | 950 | LF | GUARDRAIL |
| A6333 | | | Route 350 WB SE | 337.5 | LF | GUARDRAIL |
| A6334 | | | Route 350 EB NE | 850 | LF | GUARDRAIL |
| A6334 | | | Route 350 EB NW | 437.5 | LF | GUARDRAIL |
| A6334 | | | Route 350 EB SE | 612.5 | LF | GUARDRAIL |
| A6334 | | | Route 350 EB SW | 187.5 | LF | GUARDRAIL |
| A6335 | | | Route 350 EB NE | 1462.5 | LF | GUARDRAIL |
| A6335 | | | Route 350 EB SE | 112.5 | LF | GUARDRAIL |
| A6335 | | | Route 350 EB SW | 437.5 | LF | GUARDRAIL |
| | | | | | | |
| | | | SUBTOTAL | 1 | LUMP SUM | |

| GUARDRAIL | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SHEET NO. | STATION | STATION | LOCATION | MGS GUARDRAIL | MGS BRIDGE APPROACH TRANSITION SECTION | MGS END ANCHOR | SHAPING SLOPES, CLASS III | TYPE A CRASHWORTHY END TERMINAL (MASH) |
| | | | | LF | EA | EA | 100 FT | EA |
| A5260 | | | Route 92 NE | 137.5 | 1 | | 1 | 1 |
| A5260 | | | Route 92 NW | 137.5 | 1 | | 1 | 1 |
| A5260 | | | Route 92 SE | 137.5 | 1 | | 1 | 1 |
| A5260 | | | Route 92 SW | 137.5 | 1 | | 1 | 1 |
| A6333 | | | Route 350 WB NE | 950 | 1 | | 9 | 1 |
| A6333 | | | Route 350 WB SE | 337.5 | 1 | | 3 | 1 |
| A6334 | | | Route 350 EB NE | 850 | 2 | | 8 | |
| A6334 | | | Route 350 EB NW | 437.5 | 1 | | 4 | 1 |
| A6334 | | | Route 350 EB SE | 612.5 | 1 | 1 | 6 | |
| A6334 | | | Route 350 EB SW | 187.5 | 1 | | 2 | 1 |
| A6335 | | | Route 350 EB NE | 1462.5 | 1 | 1 | 15 | |
| A6335 | | | Route 350 EB SE | 112.5 | 1 | 1 | 1 | |
| A6335 | | | Route 350 EB SW | 437.5 | 1 | | 4 | 1 |
| | | | TOTALS | 5937.5 | 14 | 3 | 56 | 9 |

NOTE:

ALL EXISTING GUARDRAIL TO BE REMOVED AND REPLACED.

SUMMARY OF QUANTITIES
SHEET 4 OF 6

STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
2/24/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 3 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
2400 PERSHING ROAD, SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)328-8601
MO STATE CERT. OF AUTHORITY # 273. ENGINEERING

REV.

# MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

## SUMMARY OF QUANTITIES

### PAVEMENT MARKING MATERIAL

| BRIDGE PROJECT NO. | CLASS 2 PAVEMENT MARKING PAINT WITH TYPE L BEADS | | | | REMARKS |
|---|---|---|---|---|---|
| | 6" SOLID WHITE, FT. | 6" SOLID YELLOW, FT. | 6" INTERMITTENT WHITE, FT. | | |
| A5260 | | | | | |
| A5313 | | 1300 | 277 | | INTERMITTENT LINE & EDGE LINE |
| A6333 | | | 1450 | | INTERMITTENT LINE |
| A6334 | | | 787 | | INTERMITTENT LINE |
| A6335 | 578 | | 2180 | | INTERMITTENT & EDGE LINE |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| TOTAL | 578 | 1,300 | 4,694 | | |

### TRAFFIC CONTROL DEVICE SUMMARY (FOR INFORMATION ONLY)

| BRIDGE PROJECT NO. | BID ITEMS | | | | | | |
|---|---|---|---|---|---|---|---|
| | CONSTRUCTION SIGNS | CHANNELIZER (TRIM-LINE) | TYPE 3 MOVEABLE BARRICADE | TEMPORARY LIGHTING | FLASHING ARROW PANEL | CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED | DIRECTIONAL INDICATOR BARRICADES WITH SEQUENCIAL WARNING LIGHTS |
| A5260 | 359 | | 14 | 1 | | 7 | |
| A5313 | 314 | 47 | 9 | | 2 | | 16 |
| A6333 | 262 | 49 | 2 | 1 | | 1 | 14 |
| A6334 | 228 | 25 | 11 | 1 | 1 | | 18 |
| A6335 | 522 | 66 | | 1 | 1 | | 13 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| TOTAL | 1685 | 187 | 36 | 1 | 4 | 8 | 61 |

### TEMPORARY MARKING AND MARKING REMOVAL

| BRIDGE PROJECT NO. | TEMPORARY REMOVABLE MARKING TAPE | | PAVEMENT MARKING REMOVAL | | REMARKS |
|---|---|---|---|---|---|
| | 4" SOLID WHITE, FT. | 4" SOLID YELLOW, FT. | TEMPORARY TAPE, FT. | EXISTING MARKING, FT. | |
| A5260 | | | | | |
| A5313 | 1451 | 2284 | 3735 | 1577 | EDGE LINE & CENTER LINE |
| A6333 | 3871 | 2711 | 6582 | 1450 | EDGE LINE |
| A6334 | 7573 | 5134 | 12707 | 3091 | EDGE LINE |
| A6335 | 4560 | 5451 | 10011 | 829 | EDGE LINE |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| TOTAL | 17,455 | 15,580 | 33,035 | 6,947 | |

### TEMP. TRAFFIC BARRIER SUMMARY (FOR INFORMATION ONLY)

| BRIDGE PROJECT NO. | PHASE | BID ITEMS | | | |
|---|---|---|---|---|---|
| | | NEW TEMP. TRAFFIC BARRIER, FT. | TEMP. TRAFFIC BARRIER RELOCATED FROM PREVIOUS PHASE, FT. | END TREATMENT | REMARKS |
| A5260 | | | | | |
| A5313 | 1 | 287.5 | | TRAFFIC BARRIER HEIGHT TRANSITION | |
| | 2 | | 262.5 | TRAFFIC BARRIER HEIGHT TRANSITION | END TREATMENT RELOCATED FROM PHASE 1 |
| A6333 | 1 | 750 | | IMPACT ATTENUATOR (45 MPH) | |
| | 2 | 87.5 | 750 | IMPACT ATTENUATOR (45 MPH) | END TREATMENT RELOCATED FROM PHASE 1 |
| A6334 | 1 | 850 | | IMPACT ATTENUATOR (45 MPH) | |
| | 2 | | 825 | IMPACT ATTENUATOR (45 MPH) | END TREATMENT RELOCATED FROM PHASE 1 |
| A6335 | 1 | 795 | | IMPACT ATTENUATOR (45 MPH) | |
| | 2 | 605 | 795 | IMPACT ATTENUATOR (45 MPH) | END TREATMENT RELOCATED FROM PHASE 1 |
| | 3 | | 837.5 | IMPACT ATTENUATOR (45 MPH) | END TREATMENT RELOCATED FROM PHASE 2 |
| | | | | | |
| TOTAL | | 3,375 | 3,470 | | |

SUMMARY OF QUANTITIES
SHEET 5 OF 6

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 3 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

| SIGN | SIZE IN. | AREA SQ.FT. | QTY EACH | TOTAL AREA SQ.FT. | QTY RELOC EACH | TOTAL RELOC SQ.FT. | SIGN NO. | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| **WARNING SIGNS** | | | | | | | | |
| WO1-1L | 48X48 | 16.00 | | | | | | TURN (SYMBOL LEFT) |
| WO1-1R | 48X48 | 16.00 | | | | | | TURN (SYMBOL RIGHT) |
| WO1-2L | 48X48 | 16.00 | | | | | | CURVE (SYMBOL LEFT) |
| WO1-2R | 48X48 | 16.00 | | | | | | CURVE (SYMBOL RIGHT) |
| WO1-3L | 48X48 | 16.00 | | | | | | REVERSE TURN (SYMBOL LEFT) |
| WO1-3R | 48X48 | 16.00 | | | | | | REVERSE TURN (SYMBOL RIGHT) |
| WO1-4L | 48X48 | 16.00 | 1 | 16 | | | | REVERSE CURVE (SYMBOL LEFT) |
| WO1-4R | 48X48 | 16.00 | 1 | 16 | | | | REVERSE CURVE (SYMBOL RIGHT) |
| WO1-4bL | 48X48 | 16.00 | | | | | | DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT) |
| WO1-4bR | 48X48 | 16.00 | | | | | | DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT) |
| WO1-4cL | 48X48 | 16.00 | | | | | | TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT) |
| WO1-4cR | 48X48 | 16.00 | | | | | | TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT) |
| WO1-6 | 60X30 | 12.50 | 3 | 37.5 | | | | HORIZONTAL ARROW (SYMBOL) |
| WO1-6a | 72X36 | 18.00 | | | | | | HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE) |
| WO1-7 | 60X30 | 12.50 | | | | | | DOUBLE HEAD HORIZONTAL ARROW (SYMBOL) |
| WO1-7a | 72X36 | 18.00 | | | | | | DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.) |
| WO1-8 | 18X24 | 3.00 | | | | | | CHEVRON (SYMBOL) |
| WO1-8a | 30X36 | 7.50 | | | | | | CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS) |
| WO3-1 | 48X48 | 16.00 | | | | | | STOP AHEAD (SYMBOL) |
| WO3-2 | 48X48 | 16.00 | 2 | 32 | | | | YIELD AHEAD (SYMBOL) |
| WO3-3 | 48X48 | 16.00 | | | | | | SIGNAL AHEAD (SYMBOL) |
| WO3-4 | 48X48 | 16.00 | | | | | | BE PREPARED TO STOP |
| WO3-5 | 48X48 | 16.00 | | | | | | SPEED LIMIT AHEAD |
| WO4-1L | 48X48 | 16.00 | | | | | | MERGE (SYMBOL FROM LEFT) |
| WO4-1R | 48X48 | 16.00 | | | | | | MERGE (SYMBOL FROM RIGHT) |
| WO4-1aL | 48X48 | 16.00 | | | | | | MERGE (LEFT) |
| WO4-1aR | 48X48 | 16.00 | 3 | 48 | | | | MERGE (RIGHT) |
| WO5-1 | 48X48 | 16.00 | | | | | | ROAD/BRIDGE/RAMP NARROWS |
| WO5-3 | 48X48 | 16.00 | | | | | | ONE LANE BRIDGE |
| WO5-5 | 48X48 | 16.00 | | | | | | NARROW LANES |
| WO6-1 | 48X48 | 16.00 | | | | | | DIVIDED HIGHWAY (SYMBOL) |
| WO6-2 | 48X48 | 16.00 | | | | | | DIVIDED HIGHWAY END (SYMBOL) |
| WO6-3 | 48X48 | 16.00 | | | | | | TWO WAY TRAFFIC (SYMBOL) |
| WO7-3a | 30X24 | 5.00 | | | | | | NEXT XX MILES (PLAQUE) |
| WO8-1 | 48X48 | 16.00 | | | | | | BUMP |
| WO8-2 | 48X48 | 16.00 | | | | | | DIP |
| WO8-3 | 48X48 | 16.00 | | | | | | PAVEMENT ENDS |
| WO8-4 | 48X48 | 16.00 | | | | | | SOFT SHOULDER |
| WO8-5 | 48X48 | 16.00 | | | | | | SLIPPERY WHEN WET (SYMBOL) |
| WO8-6 | 48X48 | 16.00 | | | | | | TRUCK CROSSING |
| WO8-6c | 48X48 | 16.00 | | | | | | TRUCK ENTRANCE |
| WO8-7 | 36X36 | 9.00 | | | | | | LOOSE GRAVEL |
| WO8-7a | 36X36 | 9.00 | | | | | | FRESH OIL / LOOSE GRAVEL |
| WO8-9 | 48X48 | 16.00 | | | | | | LOW SHOULDER |
| WO8-11 | 48X48 | 16.00 | | | | | | UNEVEN LANES |
| WO8-12 | 48X48 | 16.00 | | | | | | NO CENTER LINE |
| WO8-15 | 48X48 | 16.00 | | | | | | GROOVED PAVEMENT |
| WO8-15P | 30X24 | 5.00 | | | | | | MOTORCYCLE (PLAQUE) |
| WO8-17L | 48X48 | 16.00 | | | | | | SHOULDER DROP-OFF (SYMBOL LEFT) |
| WO8-17R | 48X48 | 16.00 | | | | | | SHOULDER DROP-OFF (SYMBOL RIGHT) |
| WO8-17P | 30X24 | 5.00 | | | | | | SHOULDER DROP-OFF (PLAQUE) |
| W10-1 | 42RND. | 9.62 | | | | | | RAILROAD CROSSING |
| WO12-1 | 24X24 | 4.00 | | | | | | DOUBLE DOWN ARROW (SYMBOL) |
| WO12-2 | 48X48 | 16.00 | | | | | | LOW CLEARANCE (SYMBOL) |
| W012-2x | 24X18 | 3.00 | | | | | | LOW CLEARANCE (PLAQUE) |
| WO12-2a | 84X24 | 14.00 | | | | | | OVERHEAD LOW CLEARANCE (FEET AND INCHES) |
| WO12-4 | 120X60 | 50.00 | | | | | | LOW CLEARANCE XX FT XX IN XX MILES AHEAD |
| WO12-5 | 120X60 | 50.00 | | | | | | WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD |
| WO13-1 | 30X30 | 6.25 | | | | | | ADVISORY SPEED (PLAQUE) |
| WO16-2 | 30X24 | 5.00 | | | | | | XXX FEET (PLAQUE) |
| WO16-3 | 30X24 | 5.00 | | | | | | X MILE (PLAQUE) |
| WO20-1 | 48X48 | 16.00 | 22 | 352 | | | | ROAD/BRIDGE/RAMP WORK AHEAD |
| WO20-2 | 48X48 | 16.00 | 3 | 48 | | | | DETOUR AHEAD |
| WO20-3 | 48X48 | 16.00 | 2 | 32 | | | | ROAD CLOSED AHEAD |
| WO20-4 | 48X48 | 16.00 | | | | | | ONE LANE ROAD AHEAD |
| WO20-5 | 48X48 | 16.00 | 14 | 224 | | | | RIGHT/CENTER/LEFT LANE CLOSED AHEAD |
| WO20-5a | 48X48 | 16.00 | | | | | | 2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD |
| WO20-6a | 48X48 | 16.00 | 1 | 16 | | | | RIGHT/CENTER/LEFT LANE CLOSED |
| WO20-7a | 48X48 | 16.00 | | | | | | FLAGGER (SYMBOL) |
| WO21-2 | 36X36 | 9.00 | | | | | | FRESH OIL |
| WO21-5 | 48X48 | 16.00 | 4 | 64 | | | | SHOULDER WORK / SHOULDER WORK AHEAD |
| WO22-1 | 48X48 | 16.00 | | | | | | BLASTING ZONE AHEAD |
| WO22-2 | 42X36 | 10.50 | | | | | | TURN OFF 2-WAY RADIO AND PHONE |
| WO22-3 | 42X36 | 10.50 | | | | | | END BLASTING ZONE |
| GO22-1 | 21X15 | 2.19 | | | | | | WET PAINT (ARROW PIVOTS) |

| SIGN | SIZE IN. | AREA SQ.FT. | QTY EACH | TOTAL SQ.FT. | QTY RELOC EACH | TOTAL RELOC SQ.FT. | SIGN NO. | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| **GUIDE SIGNS** | | | | | | | | |
| E05-1 | 36X48 | 12.00 | | | | | | GORE EXIT |
| E05-2 | 48X36 | 12.00 | | | | | | EXIT OPEN |
| E05-2a | 48X36 | 12.00 | | | | | | EXIT CLOSED |
| GO20-1 | 60X24 | 10.00 | | | | | | ROAD WORK NEXT XX MILES |
| GO20-2 | 48X24 | 8.00 | 18 | 144 | | | | END ROAD WORK |
| GO20-4 | 36X18 | 4.50 | | | | | | PILOT CAR FOLLOW ME |
| GO20-4a | 42X30 | 8.75 | | | | | | PILOT CAR IN USE WAIT & FOLLOW |
| GO20-4a | 18X12 | 1.50 | | | | | | PILOT CAR IN USE WAIT & FOLLOW |
| GO20-5aP | 36X24 | 6.00 | 11 | 66 | | | | WORK ZONE (PLAQUE) |
| MO4-8a | 24X18 | 3.00 | | | | | | END DETOUR |
| MO4-9L | 48X36 | 12.00 | | | | | | DETOUR (LEFT) |
| MO4-9R | 48X36 | 12.00 | | | | | | DETOUR (RIGHT) |
| MO4-9P | 48X12 | 4.00 | | | | | | STREET NAME (PLAQUE) |
| MO4-10L | 48X18 | 6.00 | | | | | | DETOUR ARROW (LEFT) |
| MO4-10R | 48X18 | 6.00 | | | | | | DETOUR ARROW (RIGHT) |
| **REGULATORY SIGNS** | | | | | | | | |
| R1-1 | 48X48 | 13.25 | | | | | | STOP |
| R1-2 | 48TRI. | 6.93 | 2 | 13.86 | | | | YIELD |
| R1-2a | 36X36 | 9.00 | | | | | | TO ONCOMING TRAFFIC (PLAQUE) |
| R1-3P | 30X12 | 2.50 | | | | | | ALL WAY (PLAQUE) |
| R2-1 | 36X48 | 12.00 | 11 | 132 | | | | SPEED LIMIT 45 |
| R2-1 | 36X48 | 12.00 | 4 | 48 | | | | SPEED LIMIT 55 |
| R3-1 | 48X48 | 16.00 | | | | | | NO RIGHT TURN (SYMBOL) |
| R3-2 | 48X48 | 16.00 | | | | | | NO LEFT TURN (SYMBOL) |
| R3-3 | 36X36 | 9.00 | | | | | | NO TURNS |
| R3-4 | 48X48 | 16.00 | | | | | | NO U-TURN (SYMBOL) |
| R3-7L | 30X30 | 6.25 | | | | | | LEFT LANE MUST TURN LEFT |
| R3-7R | 30X30 | 6.25 | | | | | | RIGHT LANE MUST TURN RIGHT |
| R4-1 | 36X48 | 12.00 | | | | | | DO NOT PASS |
| R4-2 | 36X48 | 12.00 | | | | | | PASS WITH CARE |
| R4-7a | 36X48 | 12.00 | | | | | | KEEP RIGHT (HORIZONTAL ARROW) |
| R4-8a | 36X48 | 12.00 | | | | | | KEEP LEFT (HORIZONTAL ARROW) |
| R5-1 | 30X30 | 6.25 | | | | | | DO NOT ENTER |
| R5-1a | 36X24 | 6.00 | | | | | | WRONG WAY |
| R6-1L | 54X18 | 6.75 | | | | | | ONE WAY ARROW (LEFT) |
| R6-1R | 54X18 | 6.75 | | | | | | ONE WAY ARROW (RIGHT) |
| R6-2L | 24X30 | 5.00 | | | | | | ONE WAY (LEFT) |
| R6-2R | 24X30 | 5.00 | | | | | | ONE WAY (RIGHT) |
| R9-9 | 24X12 | 2.00 | 4 | 8 | | | | SIDEWALK CLOSED |
| R9-11L | 24X18 | 3.00 | 2 | 6 | | | | SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE |
| R9-11R | 24X18 | 3.00 | 2 | 6 | | | | SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE |
| R10-6 | 24X36 | 6.00 | | | | | | STOP HERE ON RED (45^ ARROW) |
| R11-2 | 48X30 | 10.00 | 2 | 20 | | | | ROAD CLOSED |
| R11-3a | 60X30 | 12.50 | | | | | | ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY |
| R11-4 | 60X30 | 12.50 | 2 | 25 | | | | ROAD CLOSED TO THRU TRAFFIC |
| CONST-3A | 60X48 | 20.00 | | | | | | FINE SIGN |
| CONST-3X | 56X12 | 4.67 | | | | | | SPEEDING/PASSING (PLATE) |
| **MISCELLANEOUS SIGNS** | | | | | | | | |
| CONST-5 | 48X36 | 12.00 | | | | | | POINT OF PRESENCE |
| CONST-5 | 96X48 | 32.00 | | | | | | POINT OF PRESENCE |
| CONST-8 | 48X36 | 12.00 | | | | | | WORK ZONE NO PHONE ZONE |
| W4-2L | 48X48 | 16.00 | 2 | 32 | | | | LEFT LANE ENDS |
| W4-2R | 48X48 | 16.00 | 2 | 32 | | | | RIGHT LANE ENDS |
| WO24-1L | 48X48 | 16.00 | 2 | 32 | | | | DOUBLE REVERSE LEFT CURVE (1 LANE) |
| SPECIAL | 36X78 | 19.50 | 12 | 234 | | | | DETOUR ROUTE ASSEMBLY |
| SPECIAL | 48X48 | 16.00 | 2 | 32 | | | | RIGHT ARROW ONLY |

| 616-10.05 CONSTRUCTION SIGNS | TOTAL |
|---|---|
| | 1685 |

| 616-10.10 RELOCATED SIGNS | TOTAL |
|---|---|
| | |

EFFECTIVE: 07-01-2025

| ITEM NUMBER | TOTAL QTY | DESCRIPTION |
|---|---|---|
| 6122008 | | IMPACT ATTENUATOR 40 MPH (SAND BARRELS) |
| 6122009 | 4 | IMPACT ATTENUATOR 45 MPH (SAND BARRELS) |
| 6122010 | | IMPACT ATTENUATOR 50 MPH (SAND BARRELS) |
| 6122012 | 8 | IMPACT ATTENUATOR 55 MPH (SAND BARRELS) |
| 6122014 | | IMPACT ATTENUATOR 60 MPH (SAND BARRELS) |
| 6122017 | | IMPACT ATTENUATOR 65 MPH (SAND BARRELS) |
| 6122019 | | IMPACT ATTENUATOR 70 MPH (SAND BARRELS) |
| 6122020 | 4 | REPLACEMENT SAND BARREL |
| 6122030 | 4 | IMPACT ATTENUATOR (RELOCATION) |
| 6122040 | | WORK ZONE CRASH CUSHION (NARROW) |
| 6122041 | | WORK ZONE CRASH CUSHION (RELOCATION) |
| 6123001 | | TRUCK MOUNTED ATTENUATOR (TMA) |
| 6161012 | | BUOYS (BOATS KEEP OUT) |
| 6161013 | | BUOYS (NO WAKE) |
| 6161014 | | SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT) |
| 6161020 | | CHANNELIZER (DRUM-LIKE) |
| 6161022 | | CHANNELIZER (CONE) |
| 6161025 | 187 | CHANNELIZER (TRIM-LINE) |
| 6161026 | | CHANNELIZER (VERTICAL PANEL) |
| 6161030 | 36 | TYPE 3 MOVEABLE BARRICADE |
| 6161033 | 61 | DIRECTION INDICATOR BARRICADE |
| 6161040 | 4 | FLASHING ARROW PANEL |
| 6161047 | | TYPE 3 OBJECT MARKER |
| 6161055 | 61 | SEQUENTIAL FLASHING WARNING LIGHT |
| 6161070 | | TUBULAR MARKER |
| 6161095 | | RADAR SPEED ADVISORY SYSTEM |
| 6161096 | | CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED |
| 6161098A | | CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED |
| 6161099 | 8 | CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED |
| 6162000A | | WORK ZONE TRAFFIC SIGNAL SYSTEM |
| 6162002 | | TEMPORARY LONG-TERM RUMBLE STRIPS |
| 6173600D | 3375 | TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED |
| 6173700B | | TEMP. TRAFFIC BARRIER ANCHORED, CONTRACTOR FURNISHED/RETAINED |
| 6173706 | | TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION CONTRACTOR FURNISHED/RETAINED |
| 6174000A | 2 | TEMP. TRAFFIC BARRIER HEIGHT TRANSITION, CONTRACTOR FURNISHED/RETAINED |
| 6175010A | 3470 | RELOCATING TEMPORARY TRAFFIC BARRIER |
| 6175011B | | RELOCATING TEMP. TRAFFIC BARRIER ANCHORED |
| 6175013 | | RELOCATING TEMP. TRAFFIC BARRIER STIFFNESS |
| 6175020A | 2 | RELOCATING TEMP. TRAFFIC BARRIER HEIGHT |
| 6208064A | | TEMPORARY RAISED PAVEMENT MARKER |
| 9019400 | 1 | TEMPORARY LIGHTING |
| 9029400 | | TEMPORARY TRAFFIC SIGNALS |
| 9029401 | | TEMPORARY TRAFFIC SIGNALS AND LIGHTING |

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED: 3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |

| DISTRICT | SHEET NO. |
|---|---|
| KC | 3 |

COUNTY: VARIOUS

JOB NO.: J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

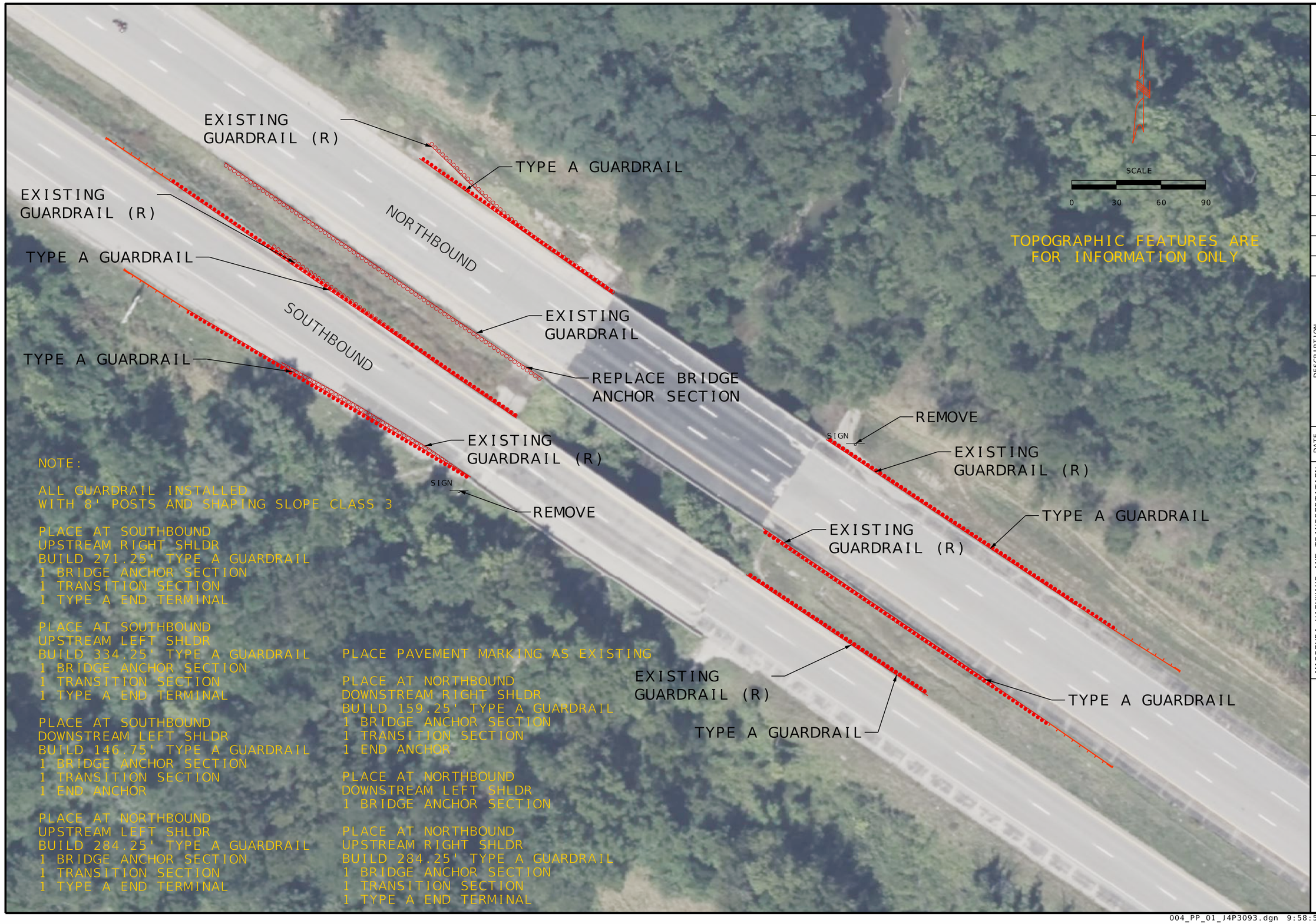

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING


# SUMMARY OF QUANTITIES

SHEET 6 OF 6




NOTE:

ALL GUARDRAIL INSTALLED
WITH 8' POSTS AND SHAPING SLOPE CLASS 3

PLACE AT SOUTHBOUND
UPSTREAM RIGHT SHLDR
BUILD 271.25' TYPE A GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 TRANSITION SECTION
1 TYPE A END TERMINAL

PLACE AT SOUTHBOUND
UPSTREAM LEFT SHLDR
BUILD 334.25' TYPE A GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 TRANSITION SECTION
1 TYPE A END TERMINAL

PLACE AT SOUTHBOUND
DOWNSTREAM LEFT SHLDR
BUILD 146.75' TYPE A GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 TRANSITION SECTION
1 END ANCHOR

PLACE AT NORTHBOUND
UPSTREAM LEFT SHLDR
BUILD 284.25' TYPE A GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 TRANSITION SECTION
1 TYPE A END TERMINAL

PLACE PAVEMENT MARKING AS EXISTING

PLACE AT NORTHBOUND
DOWNSTREAM RIGHT SHLDR
BUILD 159.25' TYPE A GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 TRANSITION SECTION
1 END ANCHOR

PLACE AT NORTHBOUND
DOWNSTREAM LEFT SHLDR
1 BRIDGE ANCHOR SECTION

PLACE AT NORTHBOUND
UPSTREAM RIGHT SHLDR
BUILD 284.25' TYPE A GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 TRANSITION SECTION
1 TYPE A END TERMINAL

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 2:04:48 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 4 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

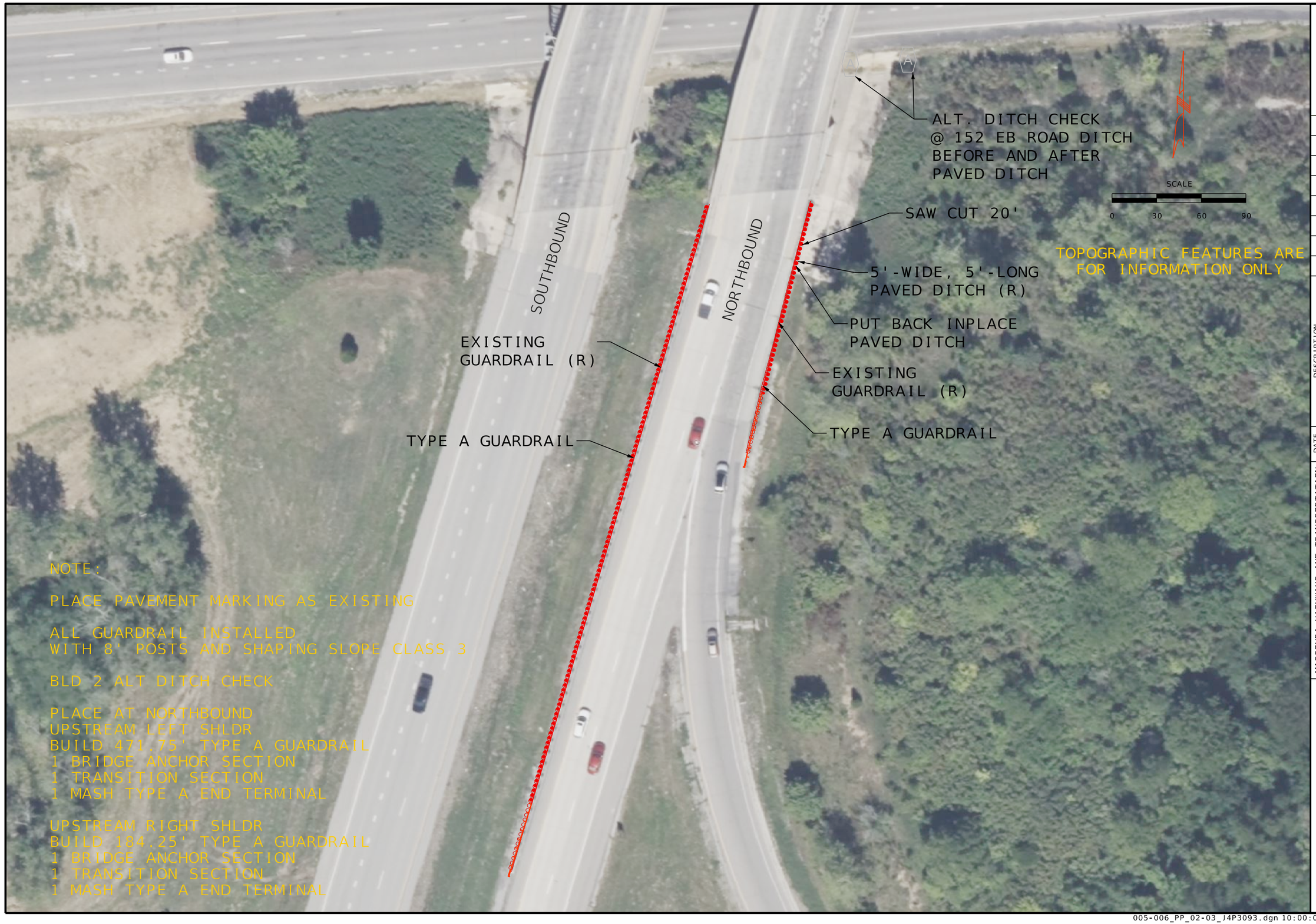
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PLAN SHEET
SHEET 1 OF 7

REV.

004_PP_01_J4P3093.dgn 9:58:59 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 7:44:33 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 5 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PLAN SHEET
SHEET 2 OF 7

REV.

005-006_PP_02-03_J4P3093.dgn 10:00:06 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER

03/02/2026 4:48 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE | VAR |
| STATE | MO |
| DISTRICT | KC |
| SHEET NO. | 6 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PLAN SHEET
SHEET 3 OF 7

REV.

005-006_PP_02-03_J4P3093.dgn 10:00:47 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




NOTE:

ALL GUARDRAIL INSTALLED WITH 8' POSTS

PLACE AT NORTHWEST CORNER
BUILD 137.5' MGS GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 MASH TYPE A END TERMINAL

PLACE AT NORTHEAST CORNER
BUILD 137.5' MGS GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 MASH TYPE A END TERMINAL

PLACE AT SOUTHWEST CORNER
BUILD 137.5' MGS GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 MASH TYPE A END TERMINAL

PLACE AT SOUTHEAST CORNER
BUILD 137.5' MGS GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 MASH TYPE A END TERMINAL

PLAN SHEET
SHEET 4 OF 7

STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
2/24/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 7 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
2400 PERSHING ROAD, SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)328-8601
MO STATE CERT. OF AUTHORITY # 273, ENGINEERING

STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
2/24/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 8 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
2400 PERSHING ROAD, SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)328-8601
MO STATE CERT. OF AUTHORITY # 273, ENGINEERING

EXISTING GUARDRAIL (R)

MGS GUARDRAIL

350 EB

MGS GUARDRAIL

EXISTING GUARDRAIL (R)

EXISTING GUARDRAIL (R)

MGS GUARDRAIL

EXISTING GUARDRAIL (R)

MGS GUARDRAIL

SCALE

0 100 200 300 400 500

NOTE:

ALL GUARDRAIL INSTALLED
WITH 8' POSTS

PLACE AT NORTHEAST CORNER
BUILD 850' MGS GUARDRAIL
2 BRIDGE ANCHOR SECTION

PLACE AT SOUTHEAST CORNER
BUILD 612.5' MGS GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 MGS END ANCHOR

PLACE AT NORTHWEST CORNER
BUILD 437.5' MGS GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 MASH TYPE A END TERMINAL

PLACE AT SOUTHWEST CORNER
BUILD 187.5' MGS GUARDRAIL
1 BRIDGE ANCHOR SECTION
1 MASH TYPE A END TERMINAL

PLAN SHEET
SHEET 6 OF 7

STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
2/24/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 9 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)


TRANSYSTEMS
2400 PERSHING ROAD, SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)328-8601
MO STATE CERT. OF AUTHORITY # 273, ENGINEERING

STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
2/24/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 10 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PLAN SHEET
SHEET 7 OF 7

TRANSYSTEMS
2400 PERSHING ROAD, SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)328-8601
MO STATE CERT. OF AUTHORITY # 273, ENGINEERING

# Sign Spacing, Device Spacing and Channelizing Taper Lengths

| SIGN SPACING (S) FOR ADVANCE SIGN SERIES (1) (2) | | |
|---|---|---|
| SPEED MPH | UNDIVIDED HIGHWAYS | DIVIDED HIGHWAYS |
| 0-35 | 200 | 200 |
| 40-45 | 350 | 500 |
| 50-55 | 500 | 1000 |
| 60-70 | 1000 | SA-1000<br>SB-1500<br>SC-2640 |

| LONGITUDINAL BUFFER SPACE (B) | |
|---|---|
| SPEED MPH | BUFFER SPACE |
| 0-35 | 250 |
| 40-45 | 360 |
| 50-55 | 495 |
| 60-70 | 730 |

| TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES | | | | | |
|---|---|---|---|---|---|
| SPEED MPH | MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W) | | | MAXIMUM CHANNELIZER SPACING | |
| | 10 FT | 11 FT | 12 FT | THROUGH TAPER | THROUGH WORK AREA |
| 0-35 | 205 | 225 | 245 | 35 | 40 |
| 40-45 | 450 | 495 | 540 | 40 | 80 |
| 50-55 | 550 | 605 | 660 | 50 | 80 |
| 60-70 | 700 | 770 | 840 | 60 | 120 |

TAPER LENGTH (L):

L = WS FOR 40 MPH OR MORE

$L = \frac{WS^2}{60}$ FOR 35 MPH OR LESS

FOR SHOULDER TAPER USE L/3

WHERE:

L = TAPER LENGTH IN FEET

W = LATERAL SHIFT IN FEET

S = POSTED SPEED IN MPH

NOTES:

DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

(1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OR SIGNED CONDITION

(2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS

## TRAFFIC CONTROL DEVICES

GENERAL NOTES:

1. SEE STANDARD PLAN 616.10 FOR DETAILS AND ITEMS NOT SHOWN
2. EXISTING SIGNS SHALL BE COVERED DURING WORKING HOURS ONLY IF IN CONFLICT WITH TRAFFIC CONTROL PLANS.
3. NO DIRECT PAYMENT WILL BE MADE FOR RELOCATING, COVERING, UNCOVERING OR REMOVING SIGNS.
4. CONES ALLOWABLE FOR DAYTIME OPERATIONS ONLY.
6. LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE, ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS OR CONES.
7. ON SITE ENGINEER SHALL MAKE APPROPRIATE ADJUSTMENTS TO TRAFFIC CONTROL AS NEEDED.

### TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- FLAGGER
- DIRECTION INDICATOR BARRICADE
- CHANNELIZER
- BARRICADE
- CHANGEABLE MESSAGE BOARD
- FLASHING ARROW PANEL
- TMA (TRUCK MOUNTED ATTENUATOR) WITH FLASHING ARROW PANEL

TEMPORARY TRAFFIC CONTROL
TA-0
SHEET 1 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 1:01:01 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED 2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 11 |

COUNTY: VARIOUS

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

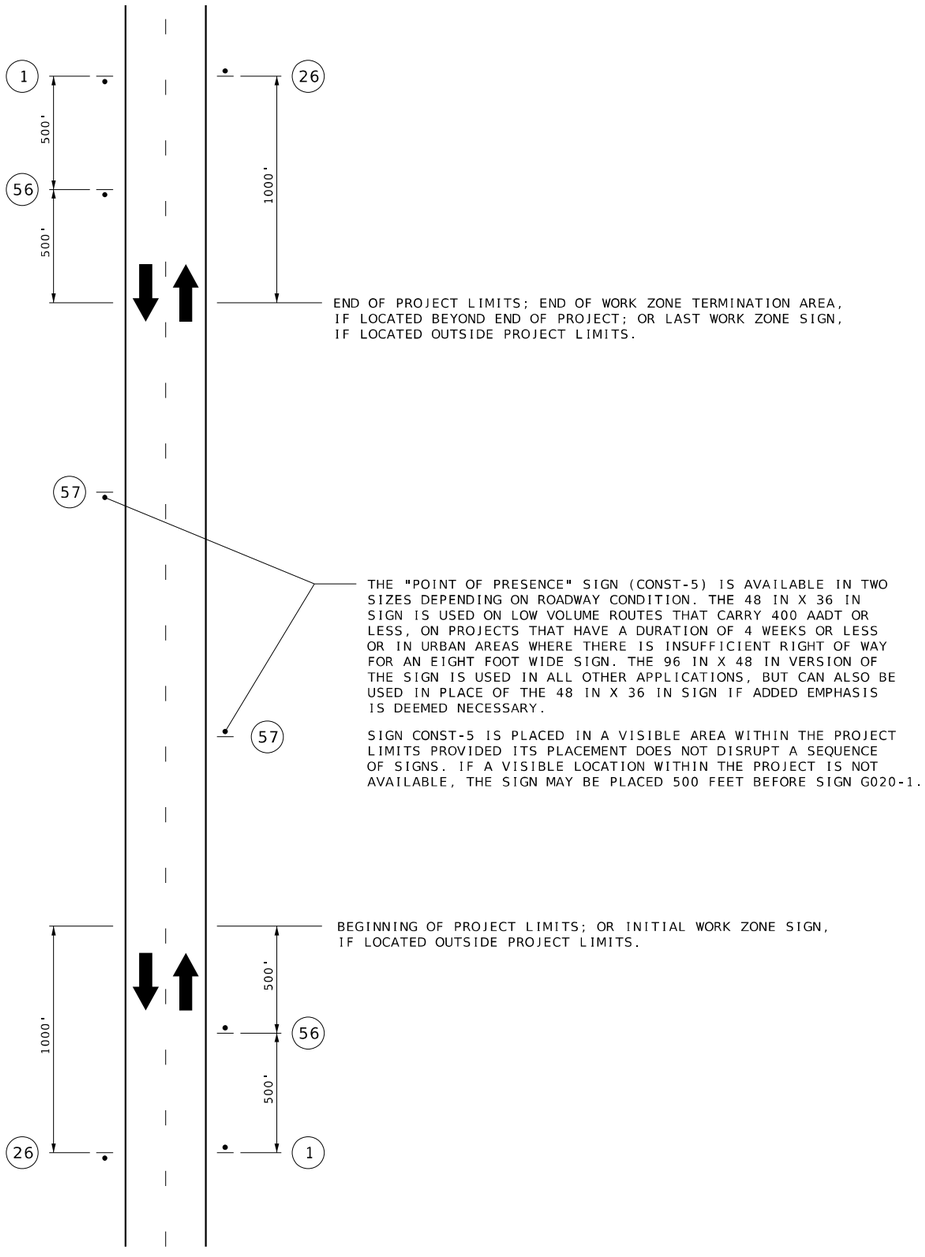
BRIDGE NO.

| DESCRIPTION | DATE | REV. |
|---|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

011_TC_01_J4P3093.dgn 10:01:38 AM 2/27/2026

NOT TO SCALE

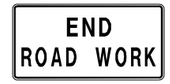






GO20-1

(1)




GO20-2

(26)




CONST-8

(56)




CONST-5

(57)

# BEGIN/END OF PROJECT SIGNING

## UNDIVIDED HIGHWAY

TEMPORARY TRAFFIC CONTROL
TA-BEGIN/END PROJECT
SHEET 2 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03:02:15 PM
THANKAM.MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 12 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

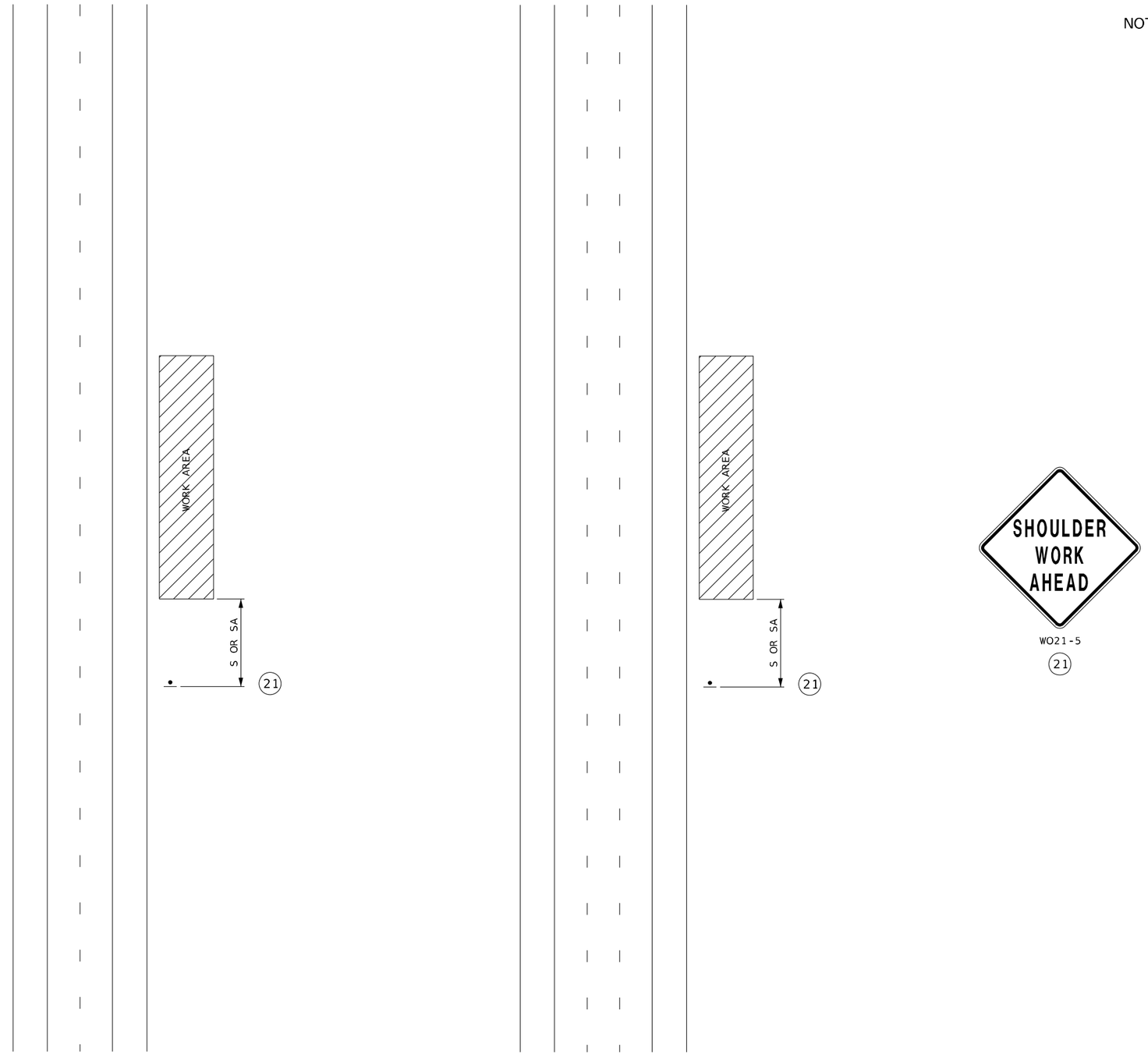
| REV. | DESCRIPTION | DATE |
|---|---|---|
| | | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

012_TC_02_J4P3093.dgn 10:02:15 AM 2/27/2026

NOT TO SCALE




WORK BEYOND THE SHOULDER

UNDIVIDED OR DIVIDED HIGHWAY

TEMPORARY TRAFFIC CONTROL
TA-01
SHEET 3 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER

03/02/2026 2:40:10 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| DATE PREPARED | |
|---|---|
| 2/27/2026 | |
| ROUTE | STATE |
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 13 |
| COUNTY | |
| VARIOUS | |
| JOB NO. | |
| J4P3093 | |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

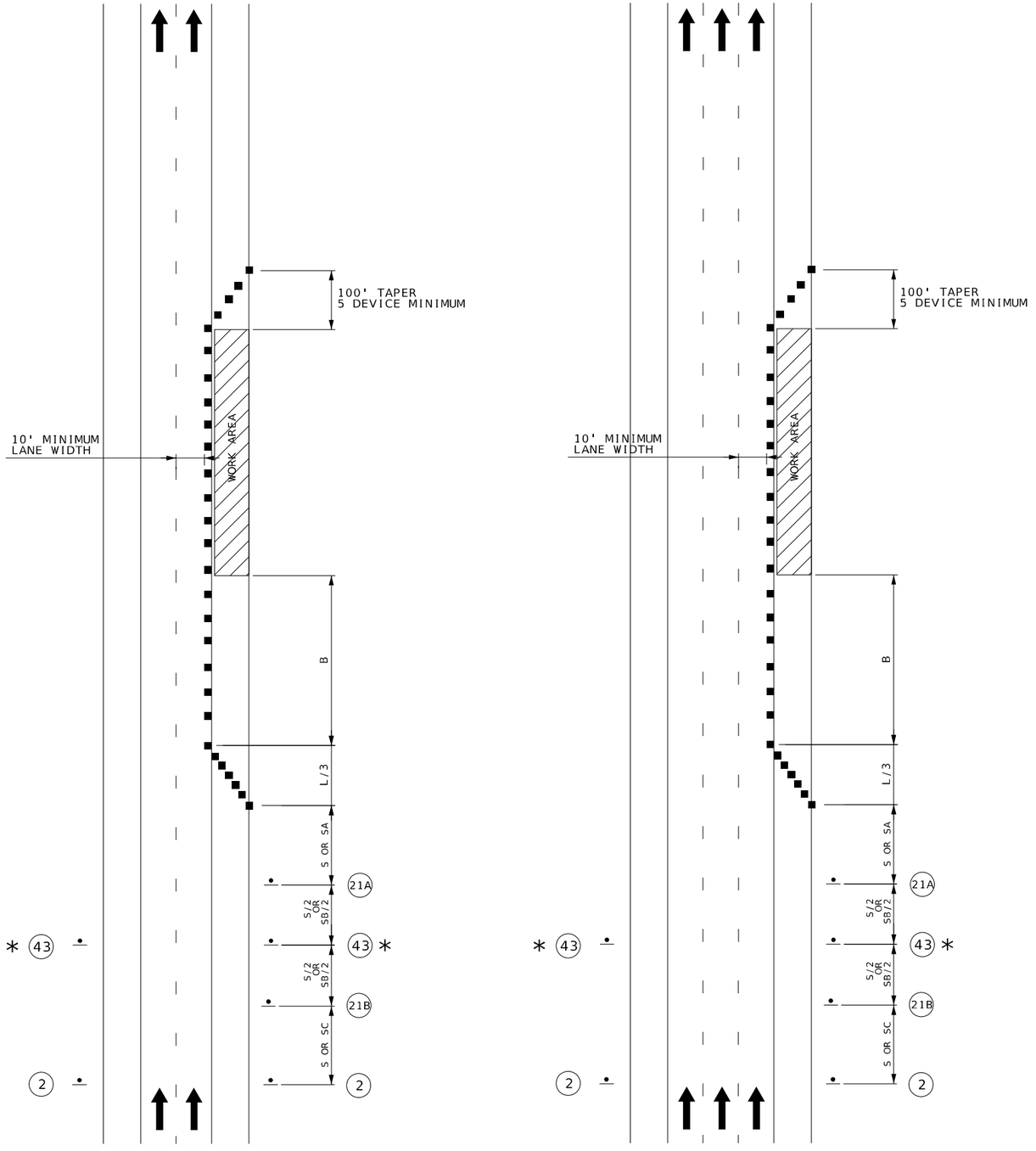
MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

013_TC_03_J4P3093.dgn 10:02:50 AM 2/27/2026

NOT TO SCALE







WO21-5bR

21B




WO21-5aR

21A




WO20-1

2




WO5-1

43 ∗OMIT SIGN 43 FOR NO TRAVELWAY ENCROACHMENT.

## SHOULDER WORK

## DIVIDED HIGHWAY

TEMPORARY TRAFFIC CONTROL
TA-03/TA-05
SHEET 4 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 12:02 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 14 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

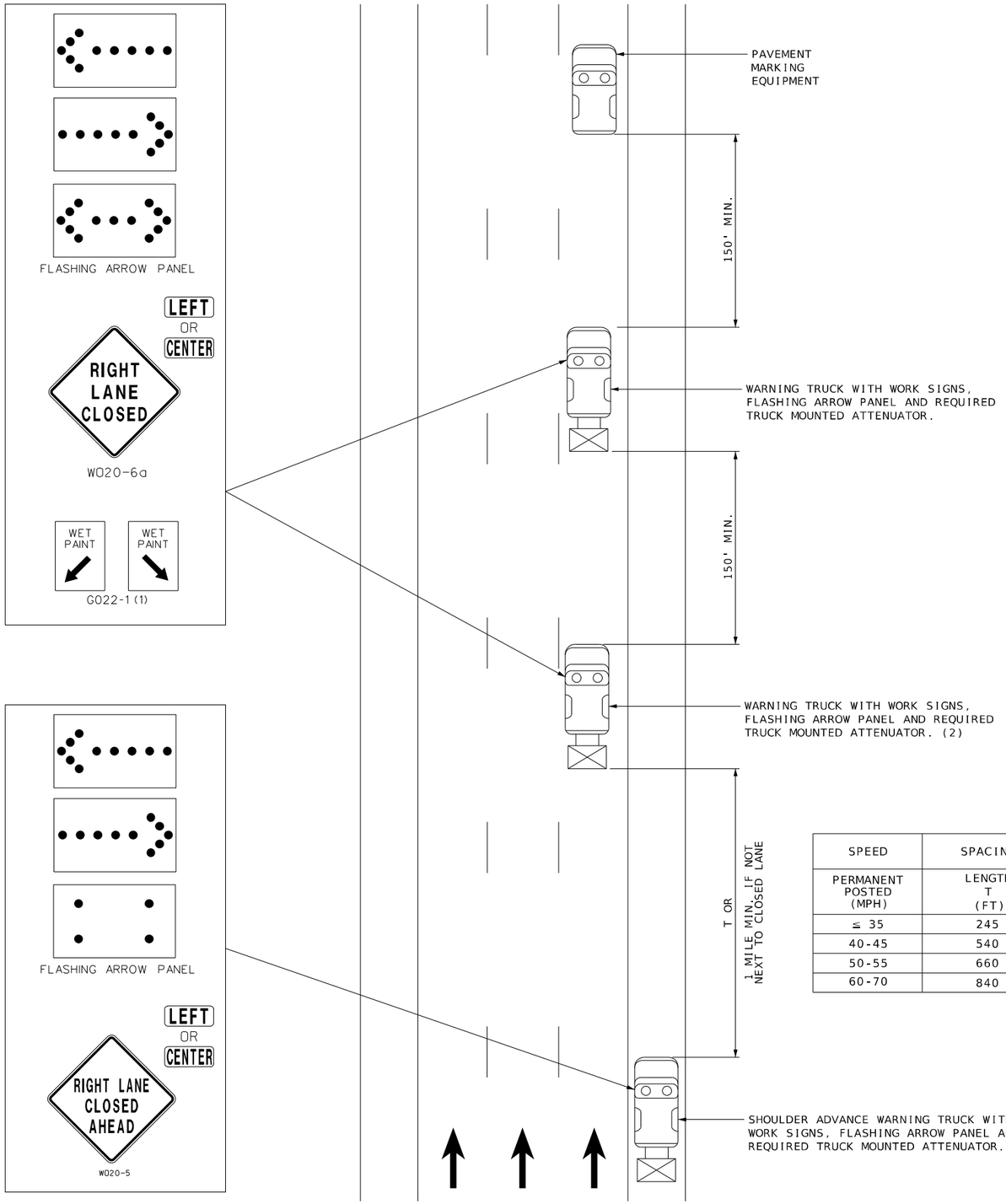
| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

014_TC_04_J4P3093.dgn 10:03:26 AM 2/27/2026




| SPEED | SPACING |
|---|---|
| PERMANENT POSTED (MPH) | LENGTH T (FT) |
| ≤ 35 | 245 |
| 40-45 | 540 |
| 50-55 | 660 |
| 60-70 | 840 |

## STRIPING ON MULTI-LANE HIGHWAY

NOT TO SCALE

NOTES:

UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PROVIDE ADDITIONAL PROTECTIVE TRUCKS EQUIPPED WITH PROPER WARNING DEVICES.

PROTECTIVE TRUCKS AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED IN A MANNER SUCH THAT THEY ARE NOT OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS ON VEHICLE-MOUNTED SIGNS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.

FLASHING ARROW PANELS SHALL BE INCIDENTAL TO TRUCK MOUNTED ATTENUATORS, WHEREVER USED. NO ADDITIONAL PAYMENT WILL BE MADE.

FLASHING ARROW PANELS SHALL, AS A MINIMUM, BE TYPE B, WITH A SIZE OF 60 X 30 INCHES.

A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE LANE CLOSED, A SEPARATE FLASHING ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.

(1) WET PAINT SIGNS ARE INSTALLED TO INDICATE THE SIDE IN WHICH THE PAVEMENT MARKING MATERIAL IS BEING APPLIED. AT THE CONTRACTOR'S OPTION, A FRONT FACING WET PAINT SIGN MAY BE INSTALLED ON THE LEFT SIDE OF THE PAVEMENT MARKING EQUIPMENT.

(2) WARNING TRUCK IS POSITIONED AT THE NO TRACK POINT OF THE PAVEMENT MARKING MATERIAL, OR SPACING SHOWN, WHICH EVER IS GREATER.

TEMPORARY TRAFFIC CONTROL
TA-35 STRIPING
SHEET 5 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/26 11:37 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED: 2/27/2026
ROUTE: VAR | STATE: MO
DISTRICT: KC | SHEET NO.: 15
COUNTY: VARIOUS
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

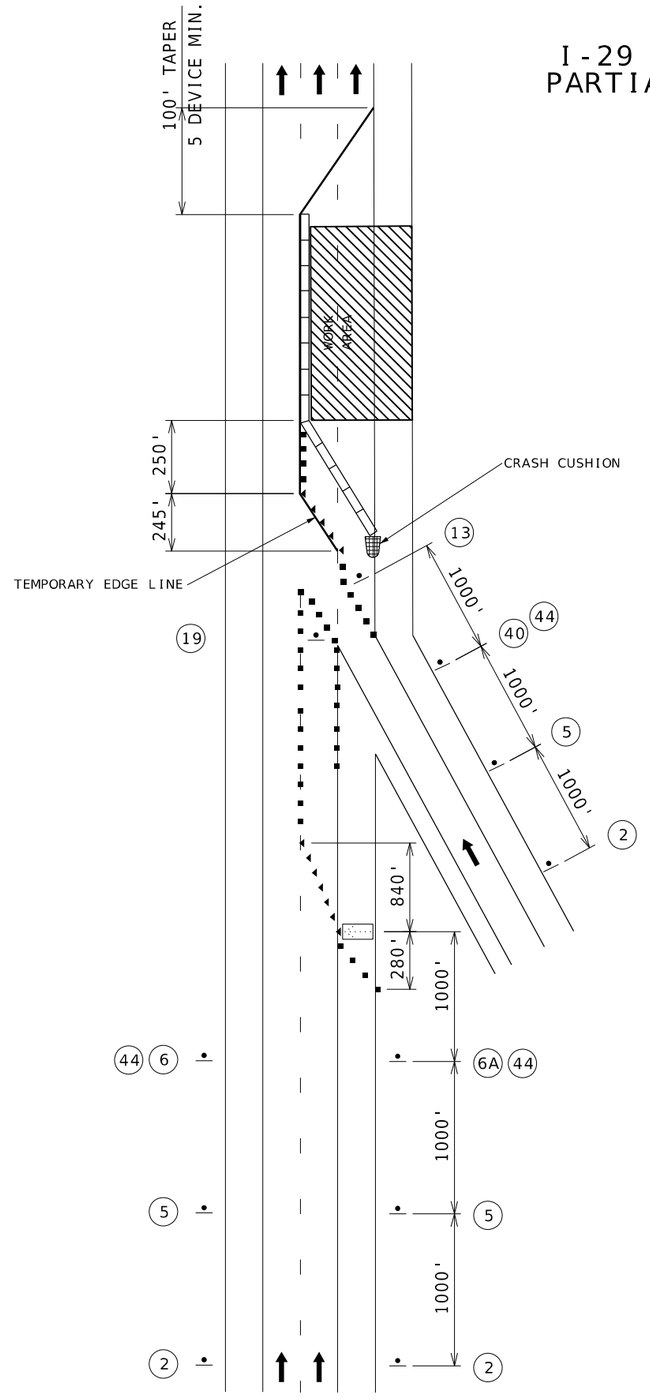
| REV. | DESCRIPTION | DATE |
|---|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

015_TC_05_J4P3093.dgn 10:04:01 AM 2/27/2026

NOT TO SCALE

# I-29 NORTHBOUND PHASE 1
# PARTIAL TWO LANE CLOSURE




WORK IN THE VICINITY
OF AN ENTRANCE RAMP




WO20-1
2




WO20-5
5



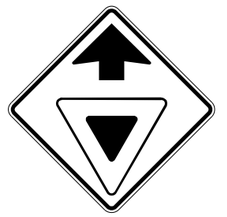

WO20-6a
6




WO4-1aL
6A



WO4-1R
19



WO3-2
40




WO13-1
44




R1-2
13

TEMPORARY TRAFFIC CONTROL
TA-44
SHEET 6 OF 68




DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |

| DISTRICT | SHEET NO. |
|---|---|
| KC | 16 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

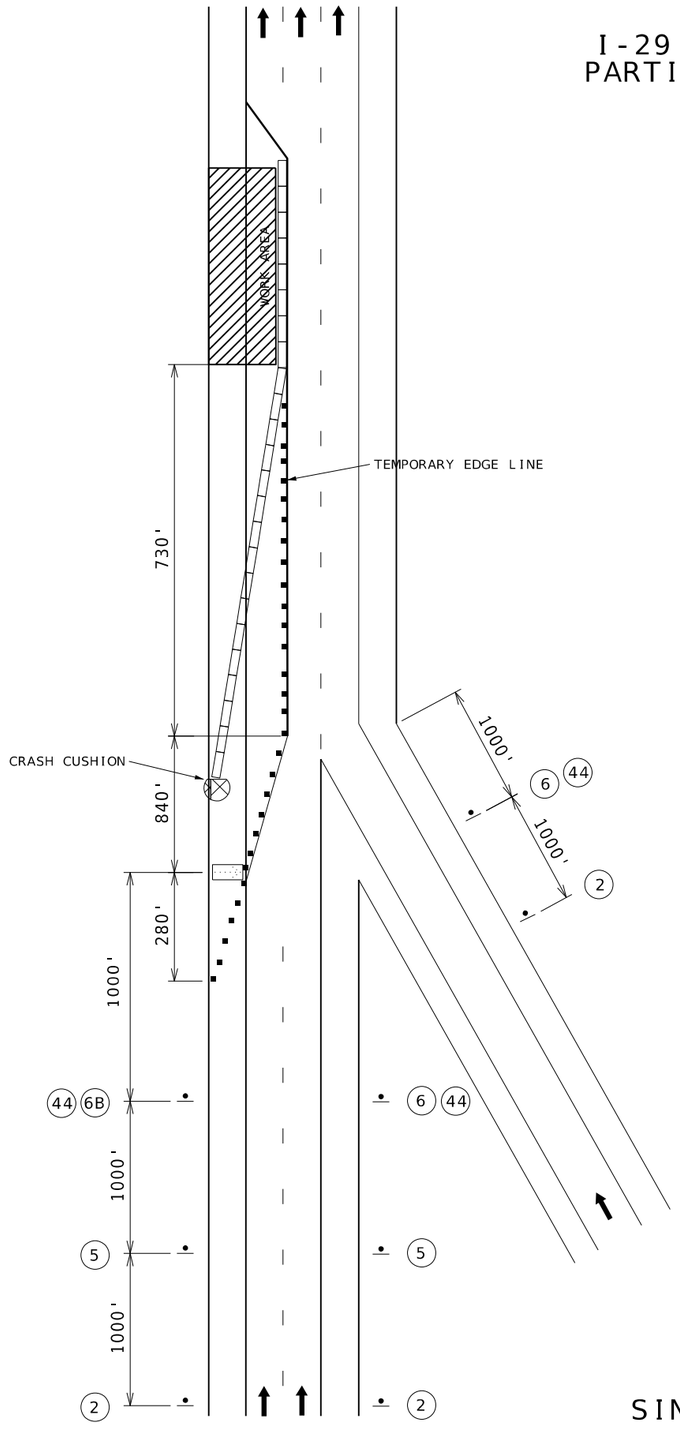
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

016_TC_06_J4P3093.dgn 10:04:35 AM 2/27/2026

NOT TO SCALE

# I-29 NORTHBOUND PHASE 2
# PARTIAL ONE LANE CLOSURE







WO20-1

2




WO20-5

5

LEFT




WO20-6a

6

LEFT




WO4-1aR

6B




WO13-1

44

## SINGLE LANE CLOSURE
## WITH BARRIER

TEMPORARY TRAFFIC CONTROL
TA-34
SHEET 7 OF 68


STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/26 2:03 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056


DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 17 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

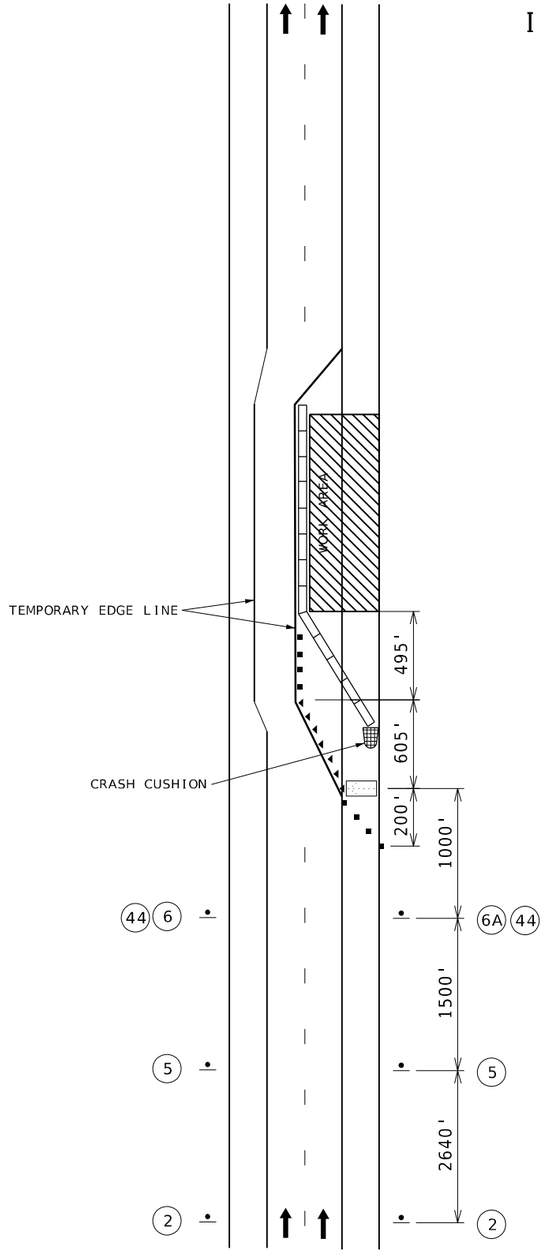
| DATE | DESCRIPTION |
|---|---|
| | |


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)


REV.

NOT TO SCALE

# I-29 SOUTHBOUND PHASE 1
# PARTIAL LANE CLOSURE




SINGLE LANE CLOSURE
WITH BARRIER




WO20-1
(2)




WO20-5
(5)

LEFT




WO20-6a
(6)

LEFT




WO4-1aL
(6A)




WO13-1
(44)

TEMPORARY TRAFFIC CONTROL
TA-34
SHEET 8 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 7:01 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 18 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

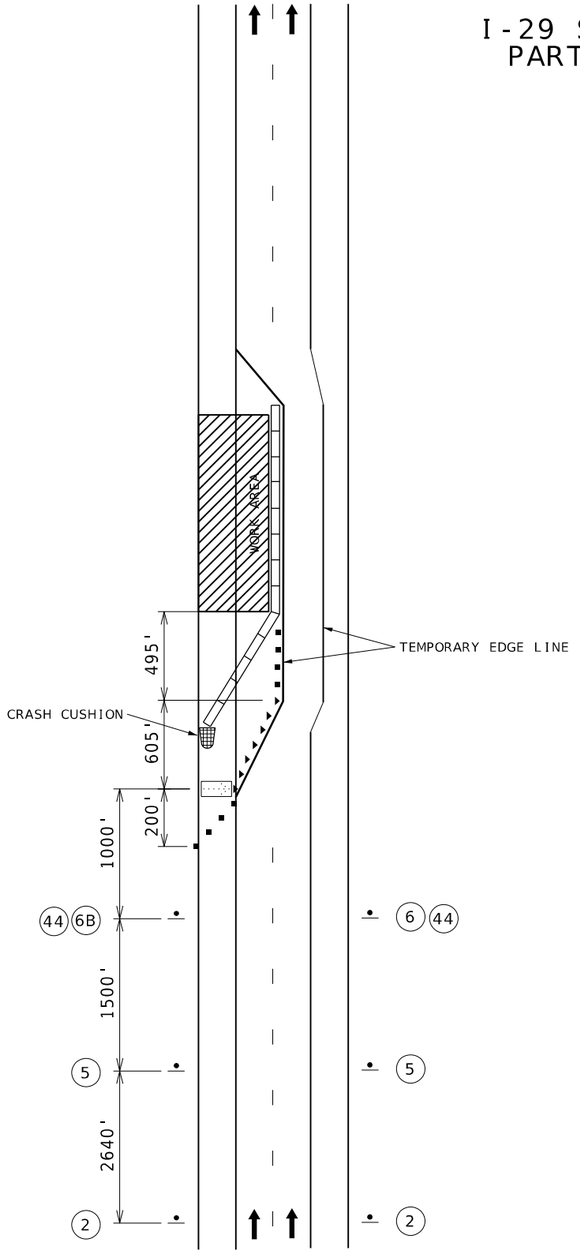
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

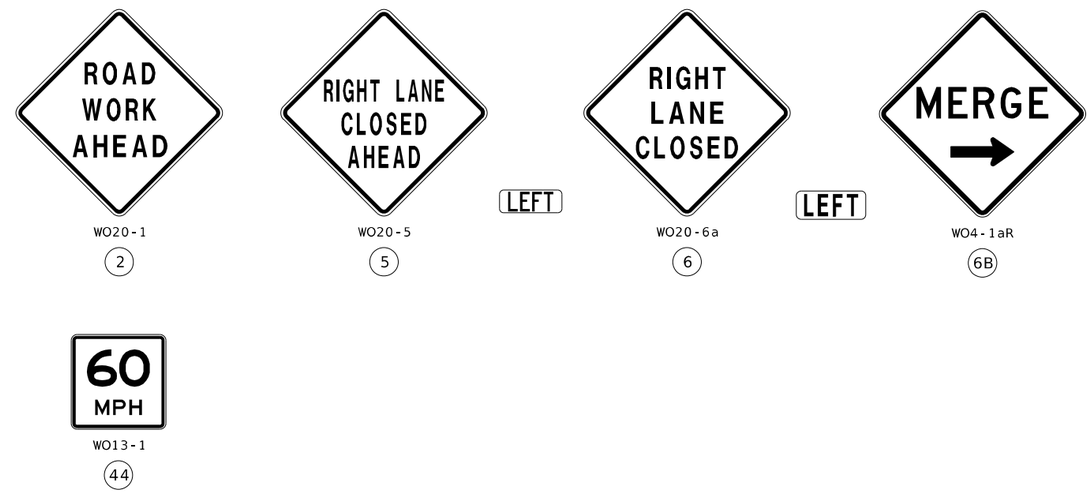
REV.

018_TC_08_J4P3093.dgn 10:05:43 AM 2/27/2026

NOT TO SCALE

# I-29 SOUTHBOUND PHASE 2
# PARTIAL LANE CLOSURE




## SINGLE LANE CLOSURE
## WITH BARRIER

TEMPORARY TRAFFIC CONTROL
TA-34
SHEET 9 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 2:31:45 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE | VAR |
| STATE | MO |
| DISTRICT | KC |
| SHEET NO. | 19 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

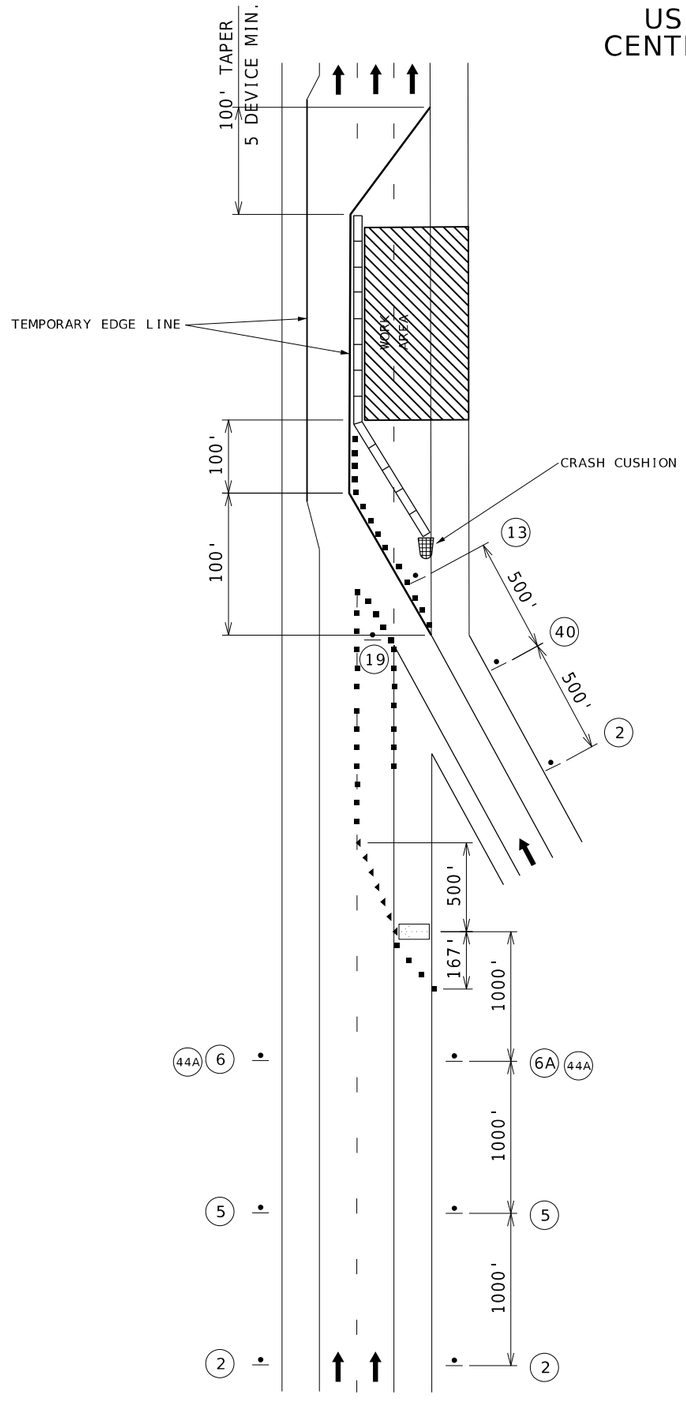
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

019_TC_09_J4P3093.dgn 10:06:14 AM 2/27/2026

NOT TO SCALE

# US-169 NORTHBOUND PHASE 1
# CENTER AND RIGHT LANE CLOSURE







WO20-1

(2)




WO20-5

(5)




WO20-6a

(6)



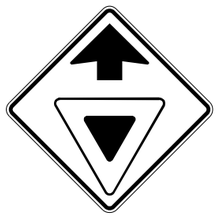

WO4-1aL

(6A)



WO4-1R

(19)



WO3-2

(40)




WO13-1

(44A)




R1-2

(13)

## WORK IN THE VICINITY OF AN ENTRANCE RAMP

TEMPORARY TRAFFIC CONTROL
TA-44
SHEET 10 OF 68


STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/03/2026 2:40 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056


DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 20 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

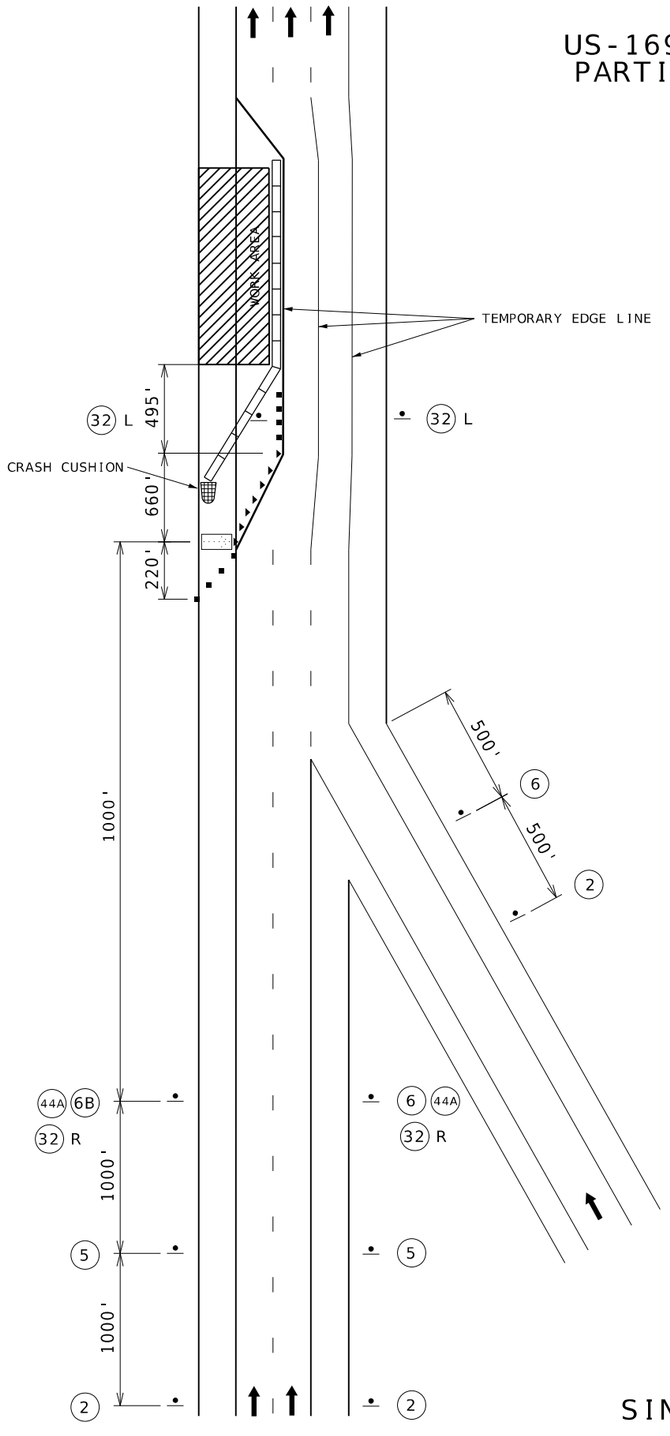
| DESCRIPTION | DATE |
|---|---|
| | |


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)


REV.

NOT TO SCALE

# US-169 NORTHBOUND PHASE 2
# PARTIAL ONE LANE CLOSURE







WO20-1

(2)




WO20-5

(5)

LEFT




WO20-6a

(6)

LEFT



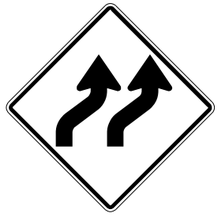

WO4-1aR

(6B)



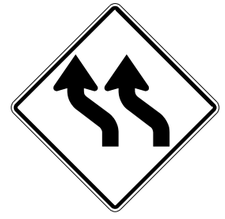

WO13-1

(44A)



WO1-4bR

(32) R



WO1-4bL

(32) L

## SINGLE LANE CLOSURE
## WITH BARRIER

TEMPORARY TRAFFIC CONTROL
TA-34
SHEET 11 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 1:20:37 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE | STATE |
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 21 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

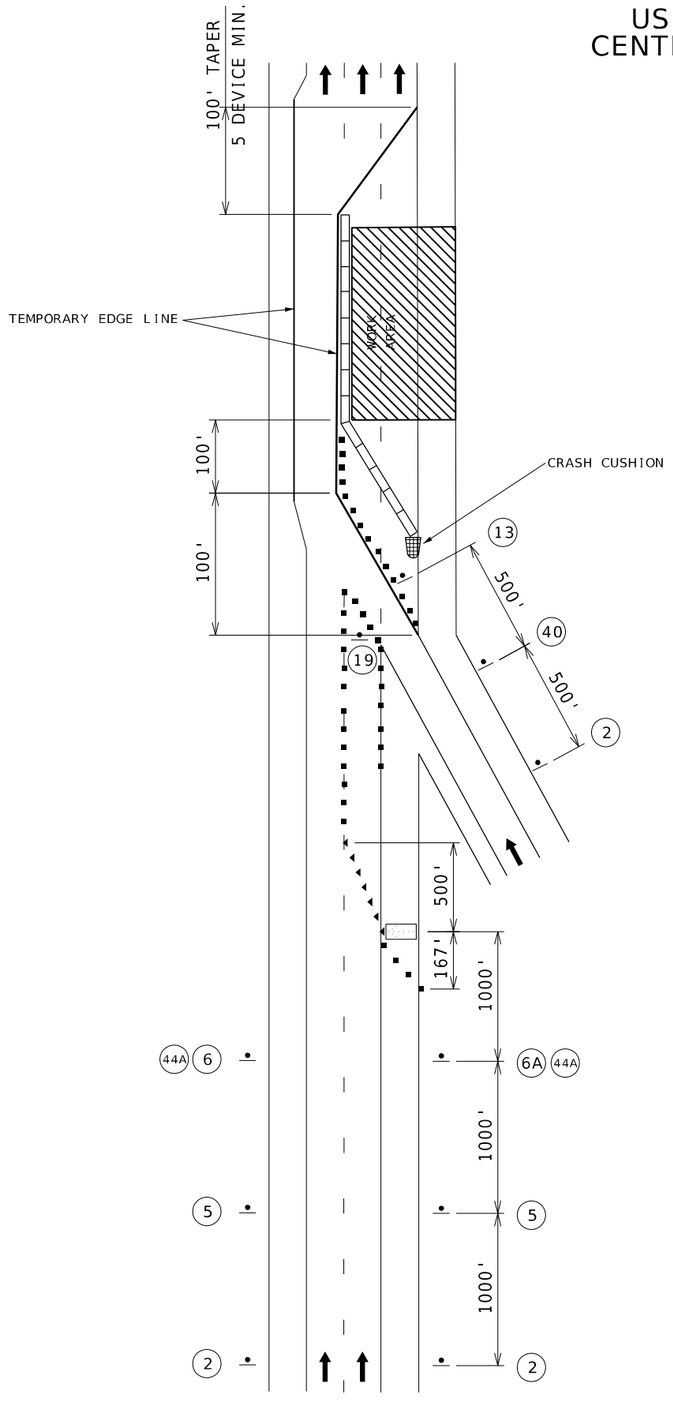
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

NOT TO SCALE

# US-169 SOUTHBOUND PHASE 1
# CENTER AND RIGHT LANE CLOSURE







WO20-1

(2)




WO20-5

(5)




WO20-6a

(6)



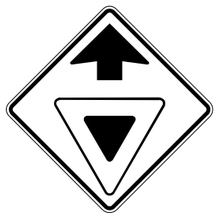

WO4-1aL

(6A)



WO4-1R

(19)



WO3-2

(40)




WO13-1

(44A)




R1-2

(13)

## WORK IN THE VICINITY OF AN ENTRANCE RAMP

TEMPORARY TRAFFIC CONTROL
TA-44
SHEET 12 OF 68


STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/26 02:03 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056


DATE PREPARED: 2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 22 |

COUNTY: VARIOUS

JOB NO.: J4P3093

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

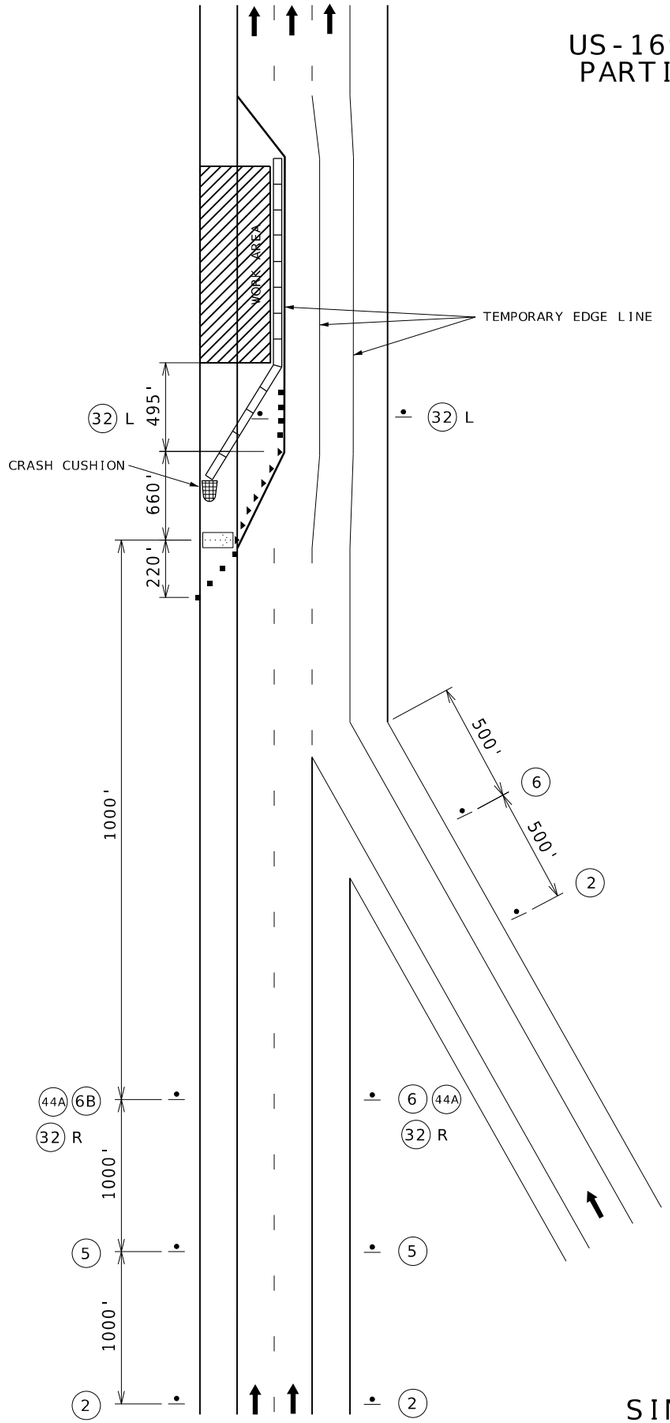
| DESCRIPTION | DATE |
|---|---|
| | |


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)


REV.

NOT TO SCALE

# US-169 SOUTHBOUND PHASE 2
# PARTIAL ONE LANE CLOSURE







WO20-1

(2)




WO20-5

(5)

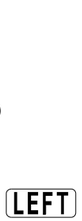






WO20-6a

(6)







WO4-1aR

(6B)




WO13-1

(44A)



WO1-4bR

(32) R



WO1-4bL

(32) L

## SINGLE LANE CLOSURE
## WITH BARRIER

TEMPORARY TRAFFIC CONTROL
TA-34
SHEET 13 OF 68

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 3:16 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 23 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

023_TC_13_J4P3093.dgn 10:08:24 AM 2/27/2026

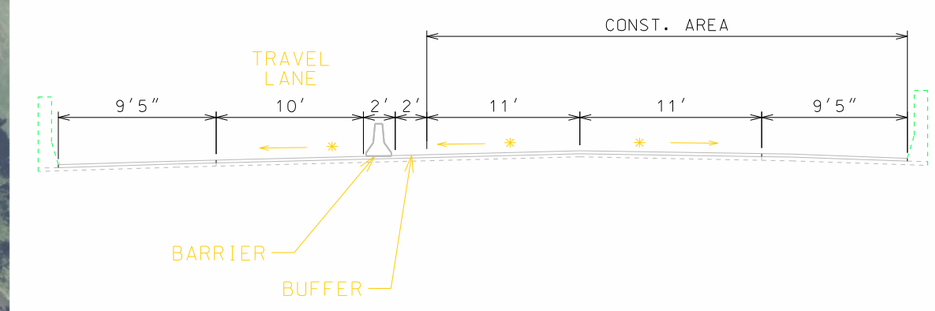
# I-29 NORTHBOUND PHASE 1
# PARTIAL TWO LANE CLOSURE
# BRIDGE VIEW

26

13

19

## A1744(NB): PHASE 1




SCALE

0 100 200 300 400 500

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 4:46 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 24 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 14 OF 68

REV.

024-027_TC_14-17_J4P3093.dgn 10:09:31 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# I-29 NORTHBOUND PHASE 1
# PARTIAL TWO LANE CLOSURE
# SOUTH VIEW-1

44
40
5
2
56
1
44
6A
44
6

SCALE
0 100 200 300 400 500

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 1:03 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 25 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 15 OF 68

REV.

024-027_TC_14-17_J4P3093.dgn 10:10:26 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# I-29 NORTHBOUND PHASE 1
# PARTIAL TWO LANE CLOSURE
# SOUTH VIEW-2

5

5

2

2

56

SCALE

0 100 200 300 400 500

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER

03/02/ :30 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |

| DISTRICT | SHEET NO. |
|---|---|
| KC | 26 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 16 OF 68

REV.

024-027_TC_14-17_J4P3093.dgn 10:11:19 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# I-29 NORTHBOUND PHASE 1
# PARTIAL TWO LANE CLOSURE
# SOUTH VIEW-3

1

SCALE
0 100 200 300 400 500

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 2:19 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 27 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 17 OF 68

REV.

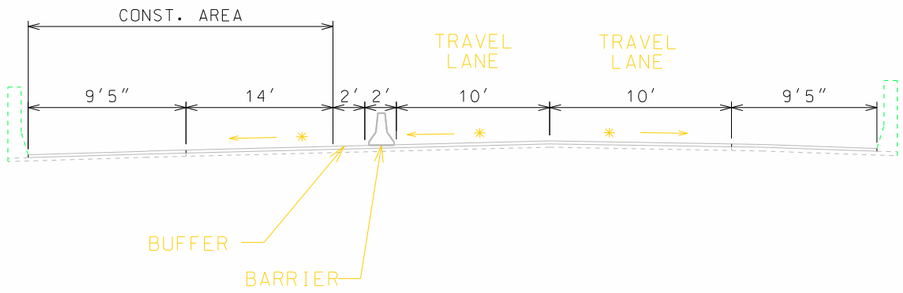


© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# I-29 NORTHBOUND PHASE 2
# PARTIAL LEFT LANE CLOSURE
# BRIDGE VIEW

26

## A1744(NB): PHASE 2




SCALE

0 100 200 300 400 500

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 4:04 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 28 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| REV. | DATE | DESCRIPTION |
|---|---|---|
| | | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 18 OF 68

028-030_TC_18-20_J4P3093.dgn 10:13:30 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




STATE OF MISSOURI
THANKAM MATHEW
NUMBER
PE-2014000056
PROFESSIONAL ENGINEER

03/02/2026 3:16:45 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE: VAR | STATE: MO |
| DISTRICT: KC | SHEET NO.: 29 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 19 OF 68

REV.

028-030_TC_18-20_J4P3093.dgn 10:14:14 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# I-29 NORTHBOUND PHASE 2
# PARTIAL LEFT LANE CLOSURE
# SOUTH VIEW-2

5

5

2

2

56

1

SCALE

0 100 200 300 400 500

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER

03:02 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 30 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 20 OF 68

REV.

028-030_TC_18-20_J4P3093.dgn 10:14:56 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER

03/02/2026 4:00 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE | VAR |
| STATE | MO |
| DISTRICT | KC |
| SHEET NO. | 31 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 21 OF 68

REV.

031-033_TC_21-23_J4P3093.dgn 10:16:31 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# I-29 SOUTHBOUND PHASE 1 / PHASE 2
# PARTIAL LANE CLOSURE LAYOUT
# SOUTHBOUND VIEW 2




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 - 1 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 32 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| REV. | DATE | DESCRIPTION |
|---|---|---|
| | | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

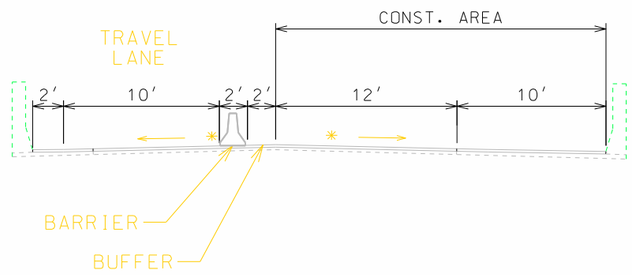
TEMPORARY TRAFFIC CONTROL
SHEET 22 OF 68

031-033_TC_21-23_J4P3093.dgn 10:17:20 AM 2/27/2026

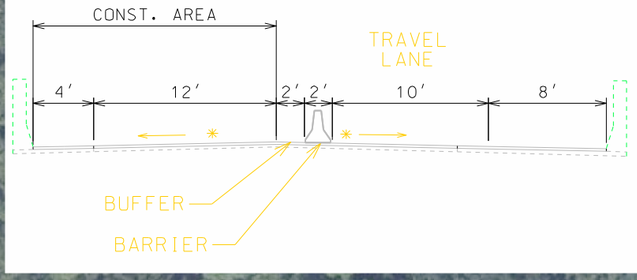
© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# I-29 SOUTHBOUND PHASE 1 / PHASE 2
# PARTIAL LANE CLOSURE LAYOUT
# BRIDGE VIEW

## A1744(SB): PHASE 1




## A1744(SB): PHASE 2




PHASE 1: RIGHT LANE CLOSURE
PHASE 2: LEFT LANE CLOSURE

SCALE
0 100 200 300 400 500

26

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 4:09 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 33 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

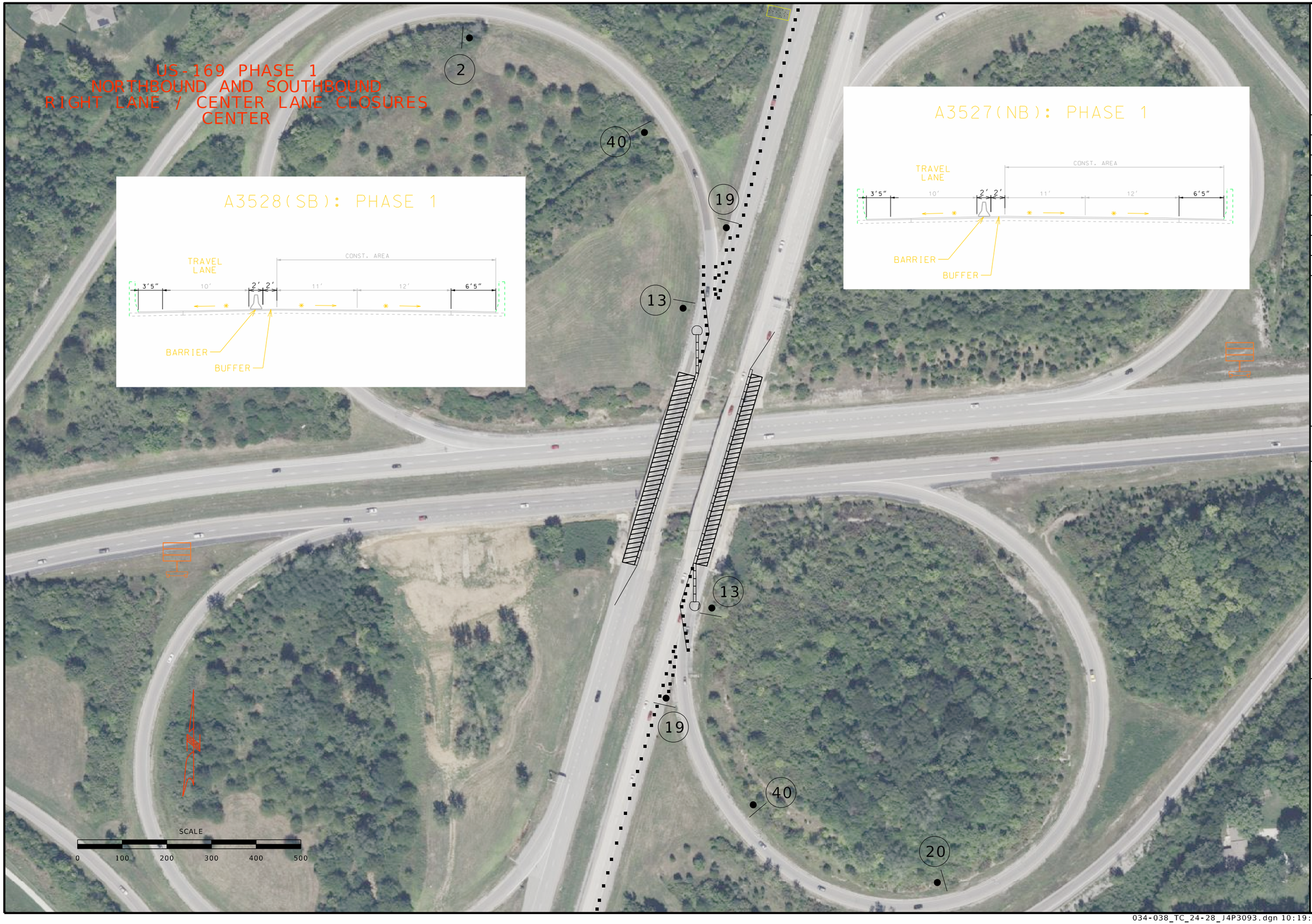
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 23 OF 68

REV.

031-033_TC_21-23_J4P3093.dgn 10:17:55 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 3:35 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE | VAR |
| STATE | MO |
| DISTRICT | KC |
| SHEET NO. | 34 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 24 OF 68

REV.

034-038_TC_24-28_J4P3093.dgn 10:19:47 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

US-169 PHASE 1
NORTHBOUND AND SOUTHBOUND
RIGHT LANE / CENTER LANE CLOSURES
NORTH-1

5

5

44A

6A

6

44A

26

SCALE
0 100 200 300 400 500

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 4:04 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 35 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 25 OF 68

REV.

034-038_TC_24-28_J4P3093.dgn 10:20:19 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# US-169 PHASE 1
## NORTHBOUND AND SOUTHBOUND
## RIGHT LANE / CENTER LANE CLOSURES
## NORTH-2




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 6:PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 36 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 26 OF 68

REV.

034-038_TC_24-28_J4P3093.dgn 10:20:52 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# US-169 PHASE 1
# NORTHBOUND AND SOUTHBOUND
# RIGHT LANE / CENTER LANE CLOSURES
# SOUTH-1




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/26 12:02 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 37 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 27 OF 68

REV.

034-038_TC_24-28_J4P3093.dgn 10:21:48 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# US-169 PHASE 1
# NORTHBOUND AND SOUTHBOUND
# RIGHT LANE / CENTER LANE CLOSURES
# SOUTH-2

2

2

56

1

SCALE

0 100 200 300 400 500

STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER

03:02 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 38 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

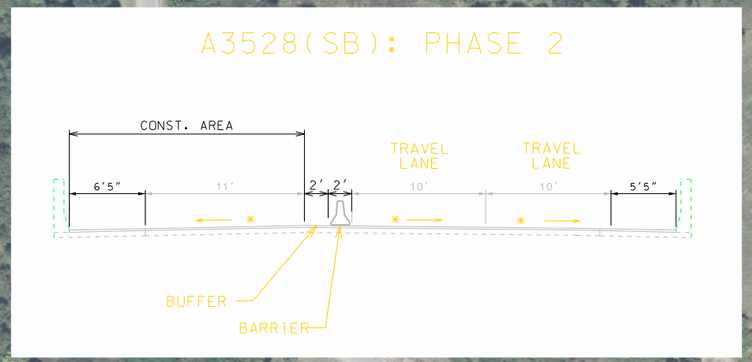
TEMPORARY TRAFFIC CONTROL
SHEET 28 OF 68

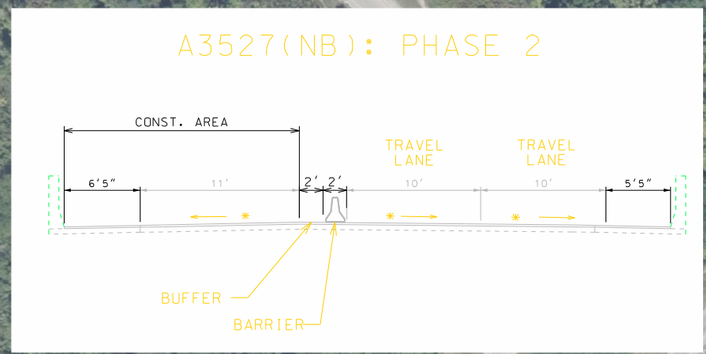
REV.

034-038_TC_24-28_J4P3093.dgn 10:22:25 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# US-169 PHASE 2
## NORTHBOUND AND SOUTHBOUND
## LEFT LANE LANE CLOSURE
## BRIDGE VIEW




SCALE
0 100 200 300 400 500


STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 3:3 PM
THANKAM MATHEW- CIVIL
MO-PE-2014000056


DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 39 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DATE | DESCRIPTION |
|---|---|
| | |


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)


TEMPORARY TRAFFIC CONTROL
SHEET 29 OF 68

REV.

039-045_TC_29-35_J4P3093.dgn 10:23:20 AM 2/27/2026


© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# US-169 PHASE 2
# NORTHBOUND AND SOUTHBOUND
# LEFT LANE LANE CLOSURE
# NORTH VIEW-1




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 1:11 PM
THANKAM.MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 40 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 30 OF 68

REV.

039-045_TC_29-35_J4P3093.dgn 10:24:10 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# US-169 PHASE 2
# NORTHBOUND AND SOUTHBOUND
# LEFT LANE LANE CLOSURE
# NORTH VIEW-2




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 3:03 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 41 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 31 OF 68

REV.

039-045_TC_29-35_J4P3093.dgn 10:25:03 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




STATE OF MISSOURI
THANKAM MATHEW
NUMBER
PE-2014000056
PROFESSIONAL ENGINEER

03/02/2026 3:47:58 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE: VAR | STATE: MO |
| DISTRICT: KC | SHEET NO.: 42 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 32 OF 68

REV.

039-045_TC_29-35_J4P3093.dgn 10:25:41 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER

03/02/2026 3:46:48 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE | VAR |
| STATE | MO |
| DISTRICT | KC |
| SHEET NO. | 43 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 33 OF 68

REV.

039-045_TC_29-35_J4P3093.dgn 10:26:34 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 3:26:06 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

| | |
|---|---|
| DATE PREPARED | 2/27/2026 |
| ROUTE | VAR |
| STATE | MO |
| DISTRICT | KC |
| SHEET NO. | 44 |
| COUNTY | VARIOUS |
| JOB NO. | J4P3093 |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

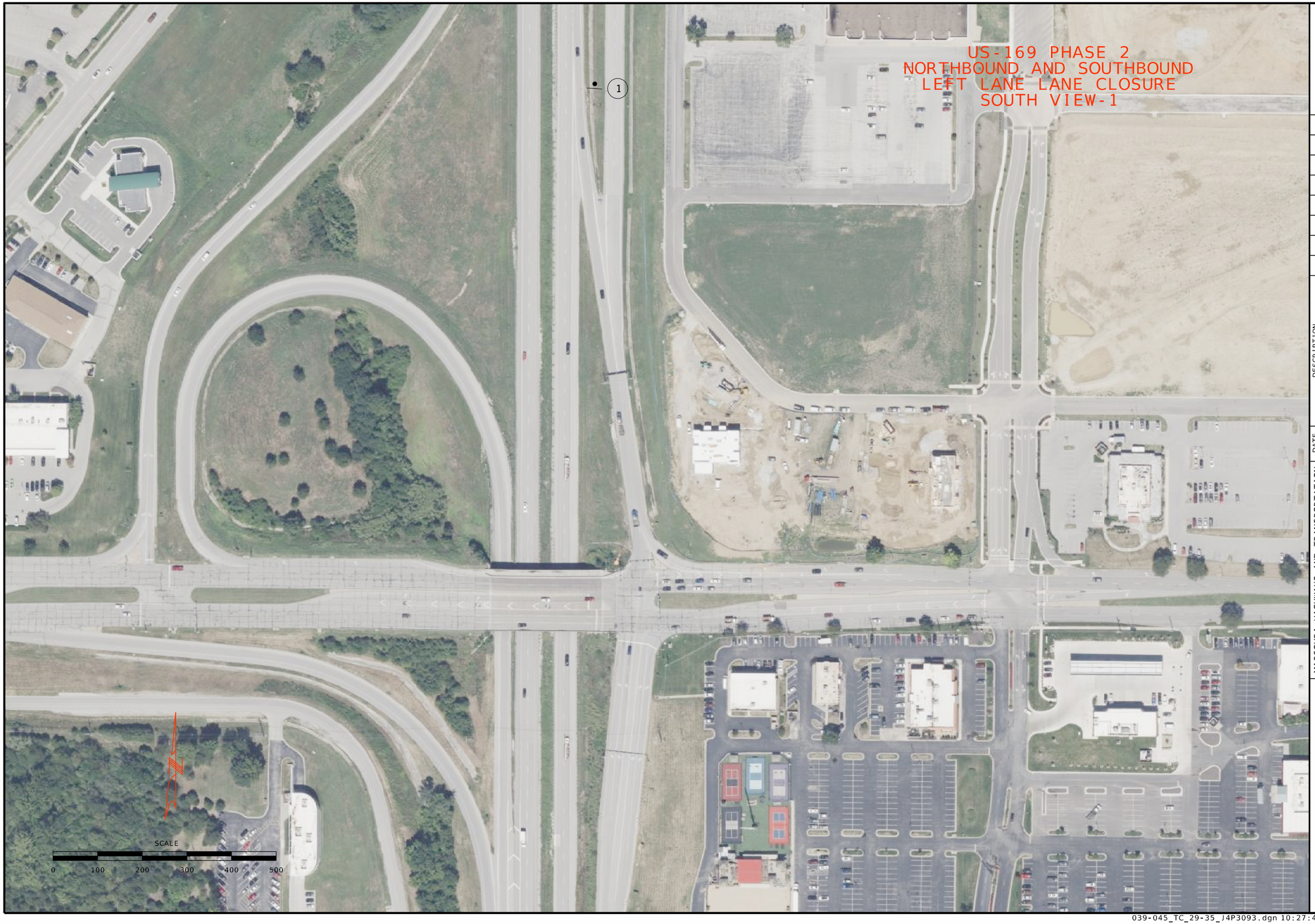
TEMPORARY TRAFFIC CONTROL
SHEET 34 OF 68

REV.

039-045_TC_29-35_J4P3093.dgn 10:27:10 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

# US-169 PHASE 2
# NORTHBOUND AND SOUTHBOUND
# LEFT LANE LANE CLOSURE
# SOUTH VIEW-1




STATE OF MISSOURI
THANKAM MATHEW
NUMBER PE-2014000056
PROFESSIONAL ENGINEER
03/02/2026 3:10:10 PM
THANKAM MATHEW - CIVIL
MO-PE-2014000056

DATE PREPARED
2/27/2026

| ROUTE | STATE |
|---|---|
| VAR | MO |
| DISTRICT | SHEET NO. |
| KC | 45 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY TRAFFIC CONTROL
SHEET 35 OF 68

REV.

039-045_TC_29-35_J4P3093.dgn 10:27:48 AM 2/27/2026

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

SIGNS AND DEVICES



WO20-1
(1)






WO20-2
(2)



WO20-5
(3)






WO20-6a
(4)





WO3-2
(5)



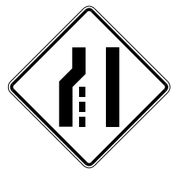
WO4-1aL
(6)



WO4-1aR
(7)



WO20-3
(8)


W4-2L
(9)


W4-2R
(10)


WO24-1L
(11)



R11-2
(12)



R11-4
(13)



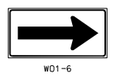
R1-2
(14)



GO20-2
(15)



GO20-5aP
(16)


W01-6
(17)



M3-2
M1-5
M6-1
(18A)



M3-2
M1-5
M6-1
(18B)



M3-4
M1-5
M6-1
(19A)



M3-4
M1-5
M6-1
(19B)



R2-1
(20)



R2-1
(21)


WO1-4R
(23)

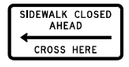

WO1-4L
(24)



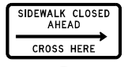
WO21-5
(25)



R9-9
(26)



R9-11L
(27)



R9-11R
(28)

## TRAFFIC CONTROL GENERAL NOTES

1. TRAFFIC CONTROL PLANS FOR 5 BRIDGE REHABILITATION PROJECTS HAVE BEEN PREPARED. THE CONTRACTOR HAS THE OPTION OF DEVELOPING AN ALTERNATE TRAFFIC CONTROL PLAN AND SUBMITTING IT TO THE ENGINEER FOR REVIEW AND APPROVAL (AT LEAST TWO WEEKS PRIOR TO PROPOSED IMPLEMENTATION). WORK ON MULTIPLE BRIDGES AT A TIME MAY BE CONDUCTED AS APPROVED BY THE ENGINEER IN CHARGE OF CONSTRUCTION.

2. THESE TRAFFIC CONTROL PLANS COVER THE MAJOR PORTIONS OF WORK INVOLVED IN EACH BRIDGE REPLACEMENT PROJECT. WORK SITUATIONS NOT SPECIFICALLY COVERED BY THE TRAFFIC CONTROL PLANS (E.G., LANE SHIFTS FOR TEMPORARY SURFACING WORK; OR, FOR INSTALLATION OF PERMANENT PAVEMENT MARKINGS), SHALL BE HANDLED IN ACCORDANCE WITH THE TYPICAL TRAFFIC CONTROL LAYOUTS SHOWN IN THESE PLANS, AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REVIEW ALL PROPOSED TRAFFIC CONTROL LAYOUTS WITH THE ENGINEER IN CHARGE OF CONSTRUCTION PRIOR TO IMPLEMENTATION.

3. ALL SIGNS, BARRICADES, CHANNELIZERS, MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, AS WELL AS SPECIFICATIONS OF THE MISSOURI DEPARTMENT OF TRANSPORTATION (MoDOT). FOR DEVICE DETAILS AND DIMENSIONS, SEE MoDOT STANDARD SHEETS 616.10 AND 617.20.

4. UNLESS OTHERWISE SHOWN, CHANNELIZERS SHALL TYPICALLY BE SPACED AS FOLLOWS:
   - 50 FEET ADJACENT TO WORK AREAS
   - 25 FEET ALONG TAPERS FOR LANE CLOSURES OR LANE SHIFTS
   - 10 FEET ALONG RADII OR DRIVEWAYS

5. THE DIMENSIONS SHOWN ON THESE DETAILS ARE TYPICAL AND MAY BE ADJUSTED TO MORE ACCURATELY REFLECT FIELD CONDITIONS IF APPROVED BY THE ENGINEER. THE ENGINEER IN CHARGE OF CONSTRUCTION WILL APPROVE THE FINAL LOCATION OF ALL TRAFFIC CONTROL DEVICES.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, POSITIONING, CLEANING AND/OR REPLACING ALL TRAFFIC CONTROL DEVICES ON AN AROUND-THE-CLOCK BASIS, WHETHER OR NOT WORK IS ACTIVELY BEING PURSUED. ANY DEFICIENCIES NOTED SHALL BE CORRECTED BY THE CONTRACTOR IMMEDIATELY.

7. ALL PAVEMENT MARKINGS (EXISTING AND/OR TEMPORARY) THAT CONFLICT WITH ANY TRAFFIC CONTROL OPERATION SHALL BE REMOVED AS SHOWN ON THESE PLANS, AS DIRECTED BY THE ENGINEER, OR AS SUMMARIZED ON THE SUMMARY OF QUANTITY SHEETS, DEPENDING ON CONDITIONS.

8. UNLESS OTHERWISE NOTED ON THE TRAFFIC CONTROL PLANS, TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVABLE PAVEMENT MARKING TAPE. THE CONTRACTOR SHALL MAINTAIN ALL TEMPORARY PAVEMENT MARKINGS THROUGHOUT THEIR INTENDED SERVICE LIVES. NO ADDITIONAL PAYMENT WILL BE MADE FOR MAINTAINING TEMPORARY PAVEMENT MARKINGS.

9. AS WORK IS COMPLETED, THE CONTRACTOR SHALL INSTALL PERMANENT MARKINGS AS SHOWN IN THESE PLANS OR AS DIRECTED BY THE ENGINEER.

10. EXISTING OR TEMPORARY SIGNS IN CONFLICT WITH THE TRAFFIC CONTROL PLANS OR THE FINAL LANE CONFIGURATION SHALL BE COVERED OR REMOVED AND EITHER RESET OR STORED ON SITE FOR RETRIEVAL BY THE OWNER AS SHOWN IN THESE PLANS OR AS DIRECTED BY THE ENGINEER. EXISTING SIGNS NECESSARY FOR TRAFFIC DURING CONSTRUCTION SHALL BE ADJUSTED (AND LATER RESET) AS NECESSARY AND AS DIRECTED BY THE ENGINEER IN CHARGE OF CONSTRUCTION TO PROVIDE PROPER VISIBILITY. ALL COSTS ASSOCIATED WITH THESE OPERATIONS SHALL BE SUBSIDIARY TO THE CONTRACT UNIT PRICE FOR ITEM NO. 616-10.05 (CONSTRUCTION SIGNS).

11. PLACEMENT OF SIGNS AND OTHER DEVICES SHOWN IN THESE PLANS MAY BE ADJUSTED TO MORE ACCURATELY REFLECT FIELD CONDITIONS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR AVOIDING ANY AND ALL UTILITIES WHEN SETTING SIGN POSTS AND SHALL COORDINATE ACTIVITIES WITH ANY AND ALL UTILITY COMPANIES WHETHER THEIR FACILITY IS SHOWN ON THE PLANS OR NOT. THE ENGINEER IN CHARGE OF CONSTRUCTION WILL APPROVE THE FINAL LOCATION OF ALL TRAFFIC CONTROL DEVICES.

12. TYPE III (MOVABLE) BARRICADES SHOWN FOR ROADWAY CLOSURES SHALL BE USED TO COMPLETELY CLOSE ACCESS TO THE ROADWAY AND SHOULDERS AT THESE POINTS. THE CONTRACTOR SHALL SECURE THE BARRICADES IN SUCH A MANNER THAT THESE DEVICES CANNOT BE EASILY MOVED BY THE PUBLIC.

13. TRAFFIC CONTROL DEVICES NOT IN USE OR NOT APPLICABLE SHALL EITHER BE COVERED OR REMOVED FROM THE WORK AREA.

14. FLAGGERS SHALL BE USED WHERE INDICATED ON THE PLANS, WHERE CONSTRUCTION VEHICLES INTERACT WITH NORMAL TRAFFIC OR WHERE CONSTRUCTION ACTIVITIES IMPOSE A RESTRICTION ON TRAFFIC, AS DIRECTED BY THE ENGINEER IN CHARGE OF CONSTRUCTION. WHERE FLAGGERS ARE USED, ADVANCE SIGNING SHALL BE ERECTED AS SHOWN OR AS SPECIFIED IN THE MUTCD. FLAGGERS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND MoDOT IN REGARD TO CHARACTER, TRAINING, ATTIRE AND BEHAVIOR. ALL FLAGGERS MUST BE CERTIFIED AS A FLAGGER WITHIN A WORK AREA BY ATSSA OR IMSA.

15. WORK VEHICLES AND EQUIPMENT SHALL BE LOCATED WITH ADEQUATE CLEARANCE FROM THE TRAVELWAY SO THAT SIGHT DISTANCES ARE NOT RESTRICTED FOR DRIVERS OR PEDESTRIANS.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL TRAFFIC LANES AND SIDEWALK AREAS FREE OF MUD AND OTHER CONSTRUCTION DEBRIS.

17. AS DIRECTED BY THE ENGINEER IN CHARGE OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL ORANGE MESH PEDESTRIAN FENCE AROUND ALL EXCAVATIONS LEFT OPEN DURING NON-CONSTRUCTION TIMES TO EFFECTIVELY SHIELD PEDESTRIANS FROM EXPOSED OBJECTS. EXCAVATIONS AND CONSTRUCTION ACTIVITIES. THERE IS NO DIRECT PAYMENT FOR PROVIDING, INSTALLING OR MAINTAINING THIS TEMPORARY FENCING.

### TAPER LENGTHS AND SPACING FOR CHANNELIZERS

| POSTED SPEED PRIOR TO CONSTRUCTION IN M.P.H. | MINIMUM LANE CLOSURE TAPER LENGTH (L) IN FEET *** | | | MINIMUM SHOULDER TAPER LENGTH IN FEET BASED ON 10' SHOULDER | BUFFER LENGTH IN FEET | MAXIMUM CHANNELIZER SPACING IN FEET | |
|---|---|---|---|---|---|---|---|
| | LANE WIDTH IN FEET | | | | | THROUGH TAPER | THROUGH WORK AREA |
| | 10 | 11 | 12 | | | | |
| 0 - 35 | 205 | 225 | 245 | 70 | 280 | 35 | 40 |
| 40 - 45 | 450 | 495 | 540 | 150 | 400 | 40 | 80 |
| 50 - 55 | 550 | 605 | 660 | 185 | 560 | 50 | 80 |
| 60 - 70 | 700 | 770 | 840 | 235 | 840 | 60 | 120 |

*** NOTE: TAPER FORMULA -

$L = WS$ $\quad S \geq 45$ MPH

$L = (WS^2)/60$ $\quad S \leq 40$ MPH

WHERE
L = MINIMUM TAPER LENGTH (FEET)
S = POSTED SPEED LIMIT (MPH)
W = WIDTH OF OFFSET (FEET)

### SIGN SPACING FOR ADVANCE SIGN SERIES (1) (2)

| POSTED SPEED PRIOR TO CONSTRUCTION IN M.P.H. | UNDIVIDED HIGHWAYS IN FEET | DIVIDED HIGHWAYS IN FEET |
|---|---|---|
| 0 - 35 | 200 | 200 |
| 40 - 45 | 350 | 500 |
| 50 - 55 | 500 | 1000 |
| 60 - 70 | 1000 | SA - 1000, SB - 1500, SC - 2640 |

(1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER OR SIGNED CONDITION.

(2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

• SIGN (SINGLE SIDED) FLAGGER ■ CHANNELIZER CHANGEABLE MESSAGE BOARD

• SIGN (DOUBLE SIDED) ▲ DIRECTIONAL INDICATOR BARRICADES WITH SEQUENTIAL LIGHTS BARRICADE

TRAFFIC CONTROL LEGEND
SHEET 36 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 3/3/2026
ROUTE VARIOUS | STATE MO
DISTRICT KC | SHEET NO. 46
COUNTY VARIOUS
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

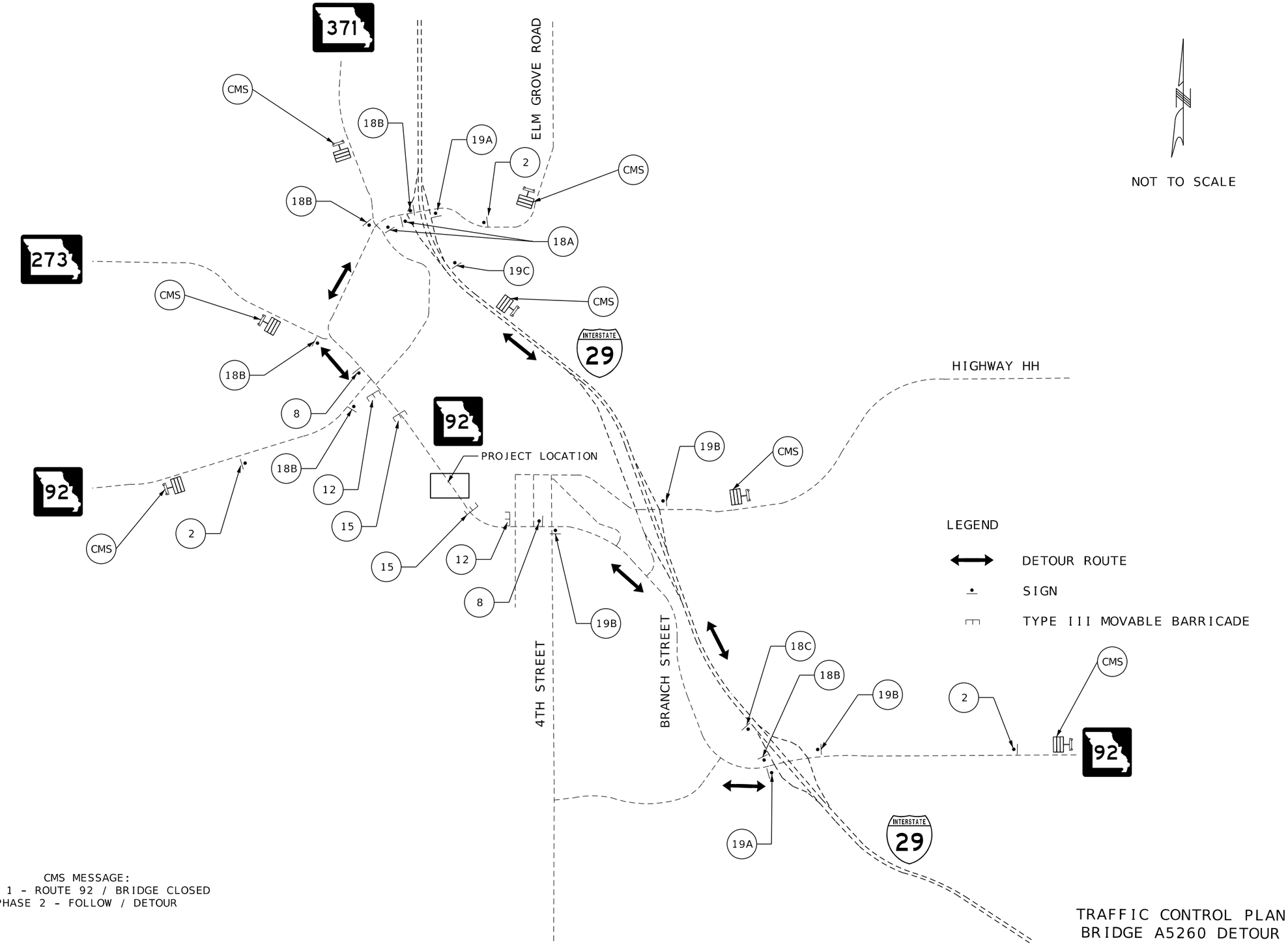
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2025/KC101/101250103/Road/Plan Sheets/046_TC_01-68_J4P3093_36.dgn 3:12:51 PM 3/3/2026




STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 47 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

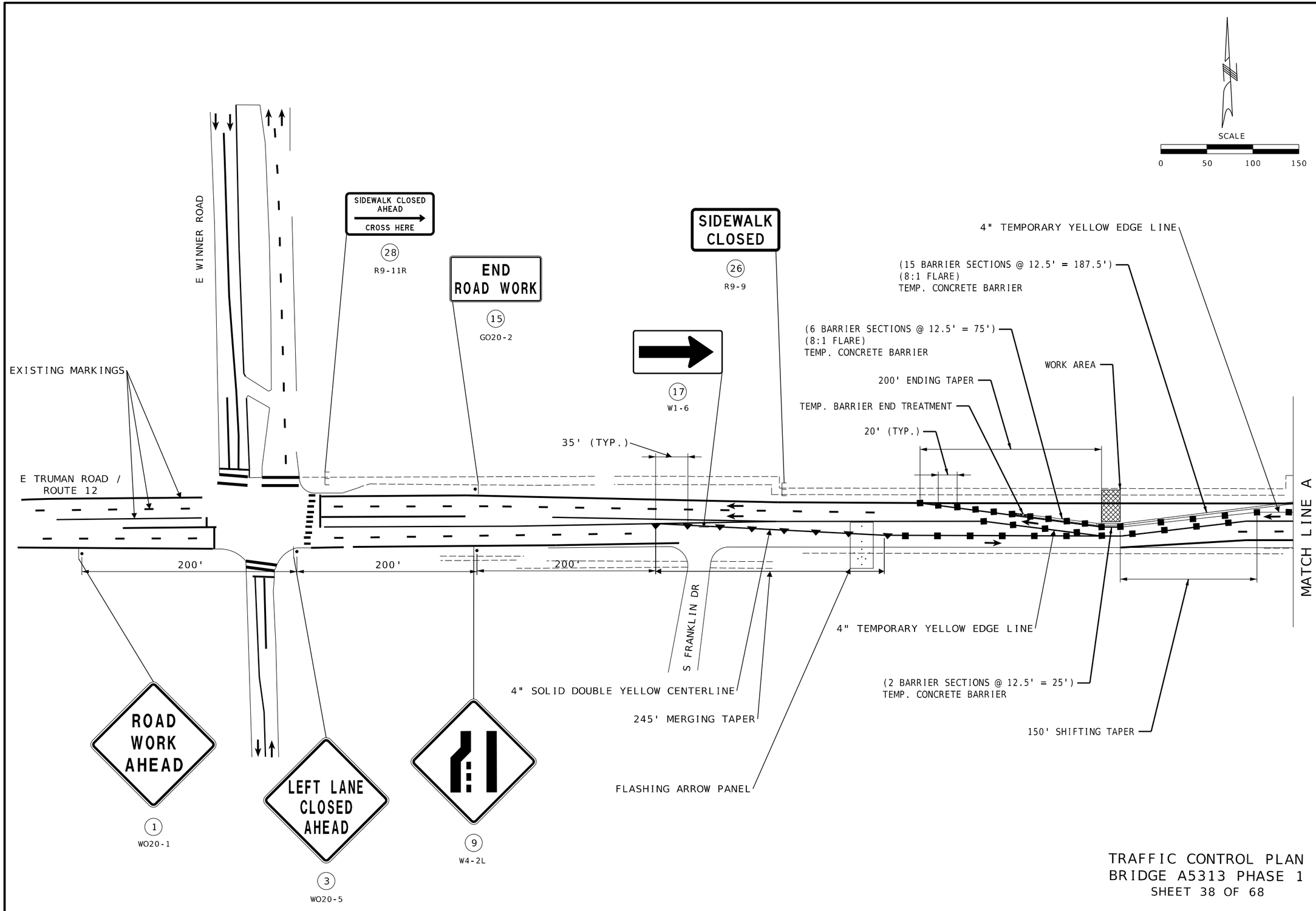
PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)


TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A5313 PHASE 1
SHEET 38 OF 68

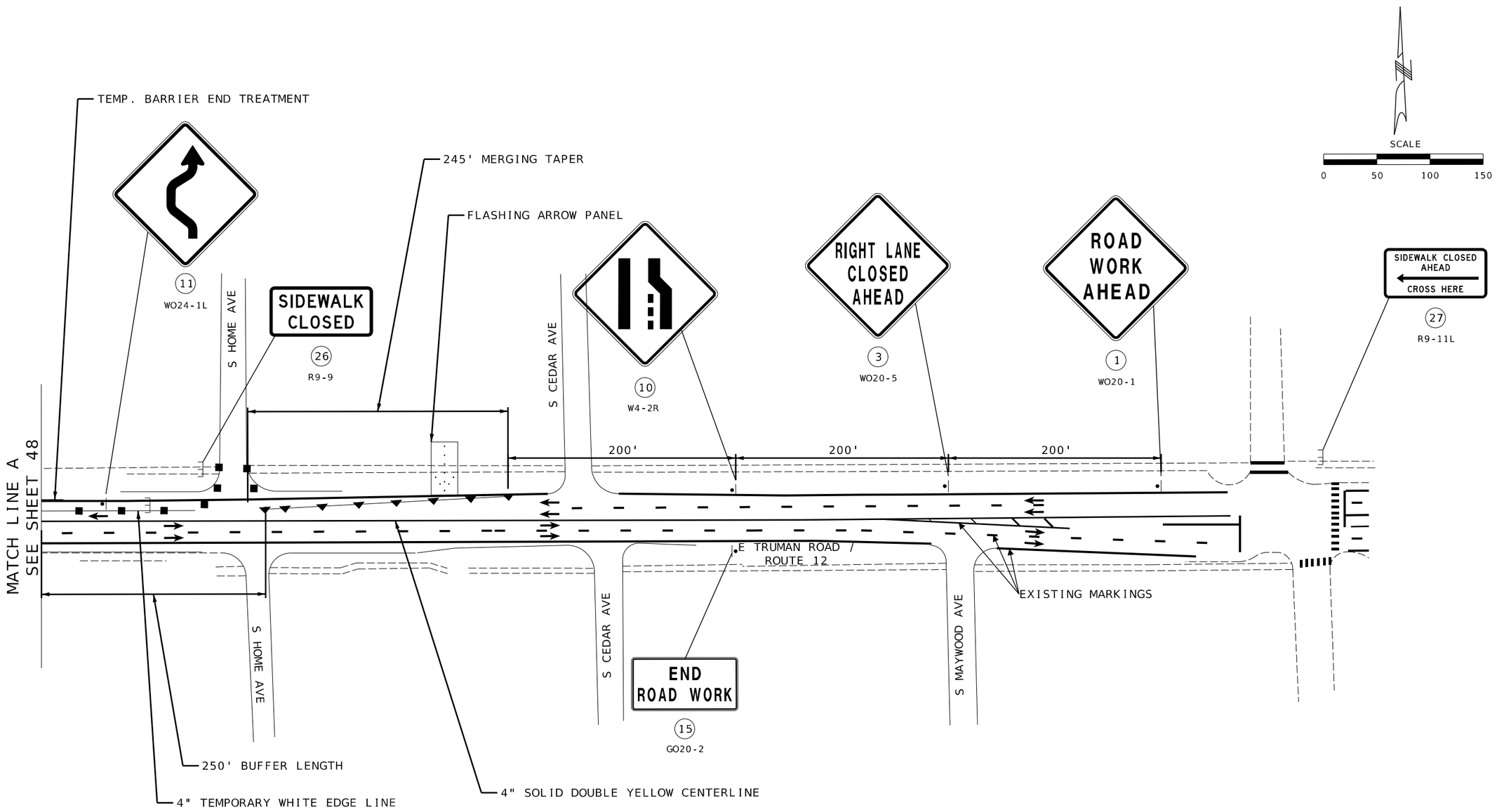
STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED: 3/3/2026
ROUTE: VARIOUS
STATE: MO
DISTRICT: KC
SHEET NO.: 48
COUNTY: VARIOUS
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A5313 PHASE 1
SHEET 39 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 49 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

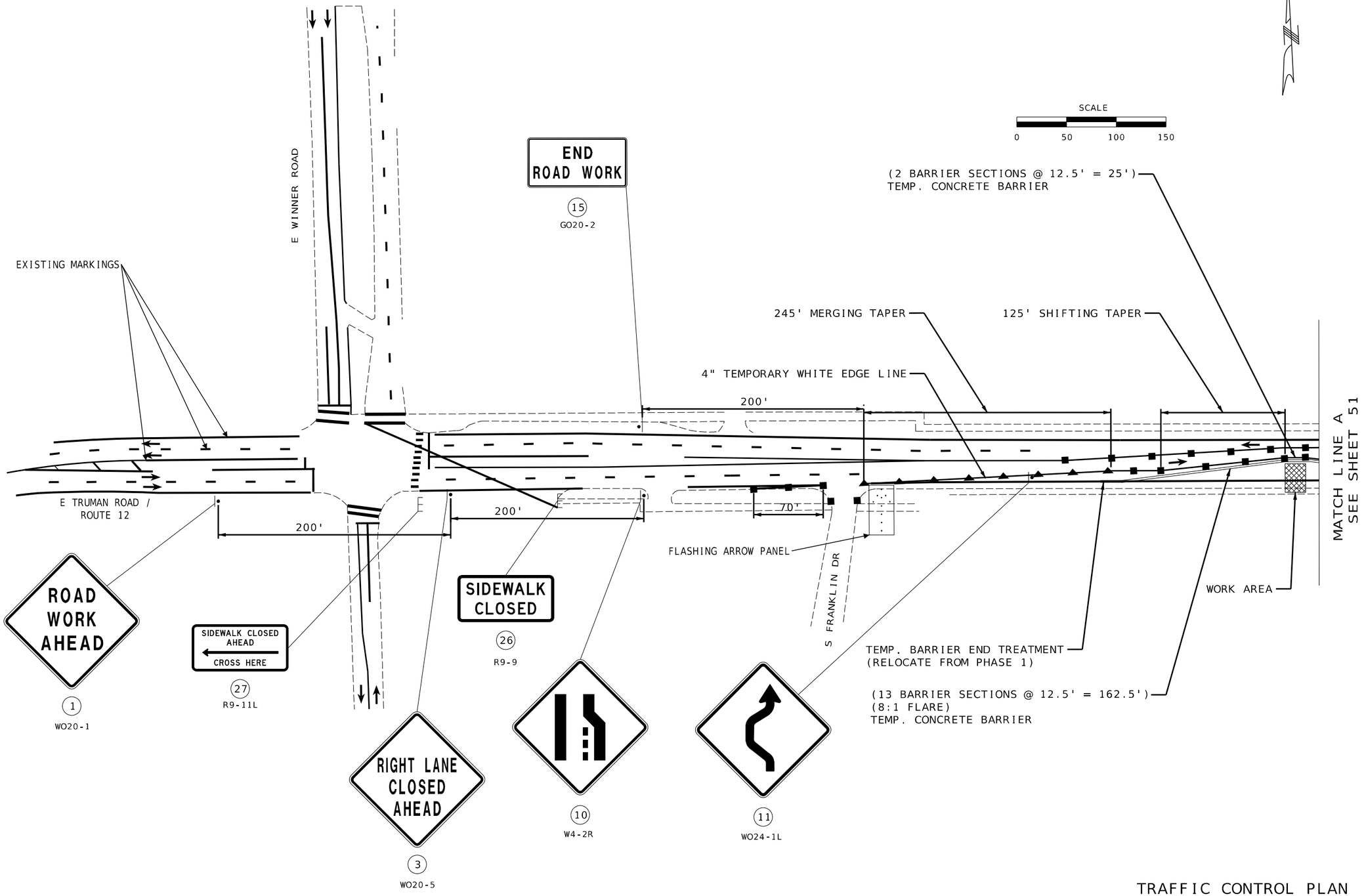
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




# TRAFFIC CONTROL PLAN
# BRIDGE A5313 PHASE 2
SHEET 40 OF 68

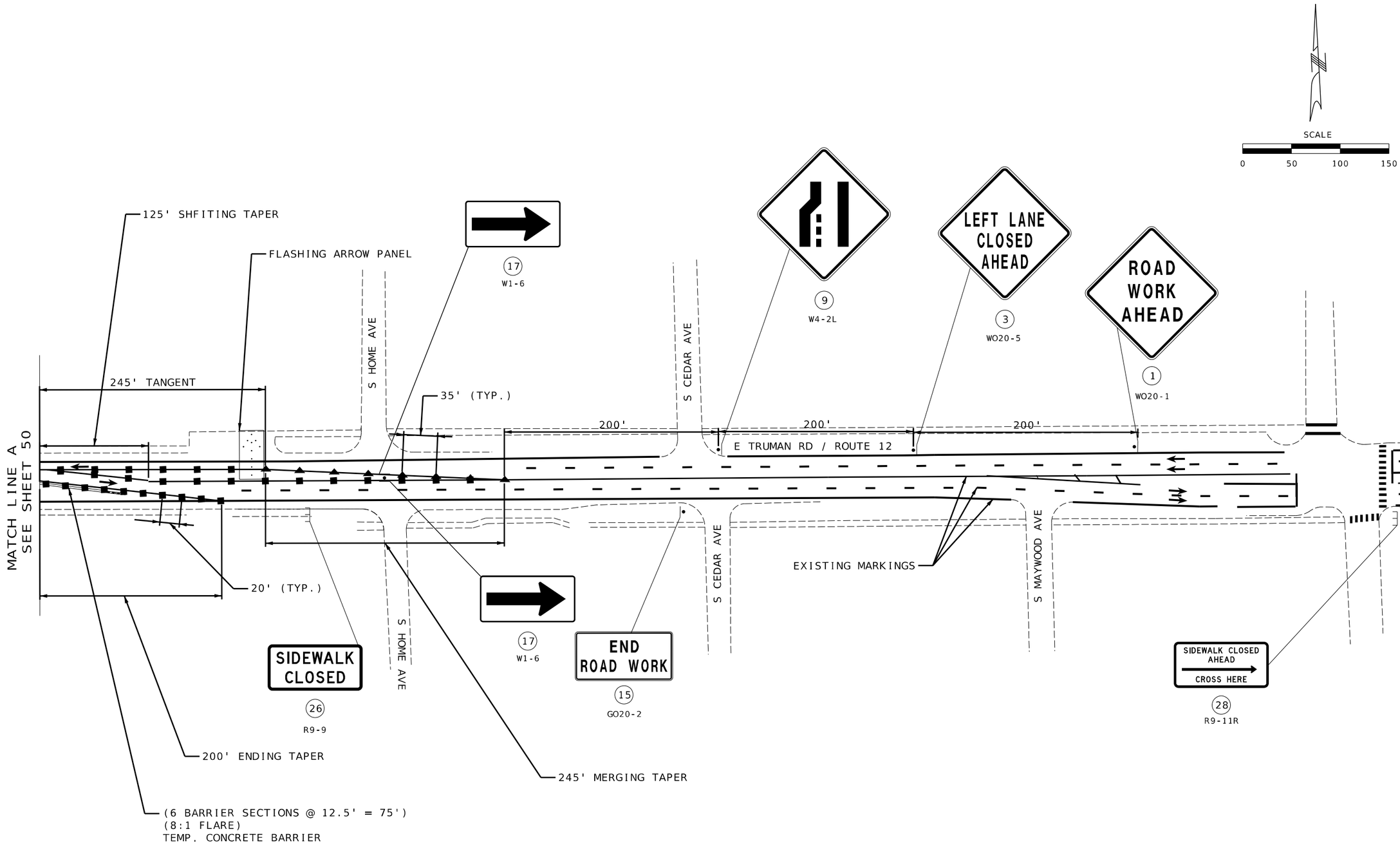
STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED: 3/3/2026
ROUTE: VARIOUS | STATE: MO
DISTRICT: KC | SHEET NO.: 50
COUNTY: VARIOUS
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A5313 PHASE 2
SHEET 41 OF 68

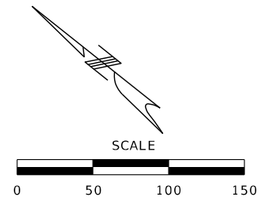
STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

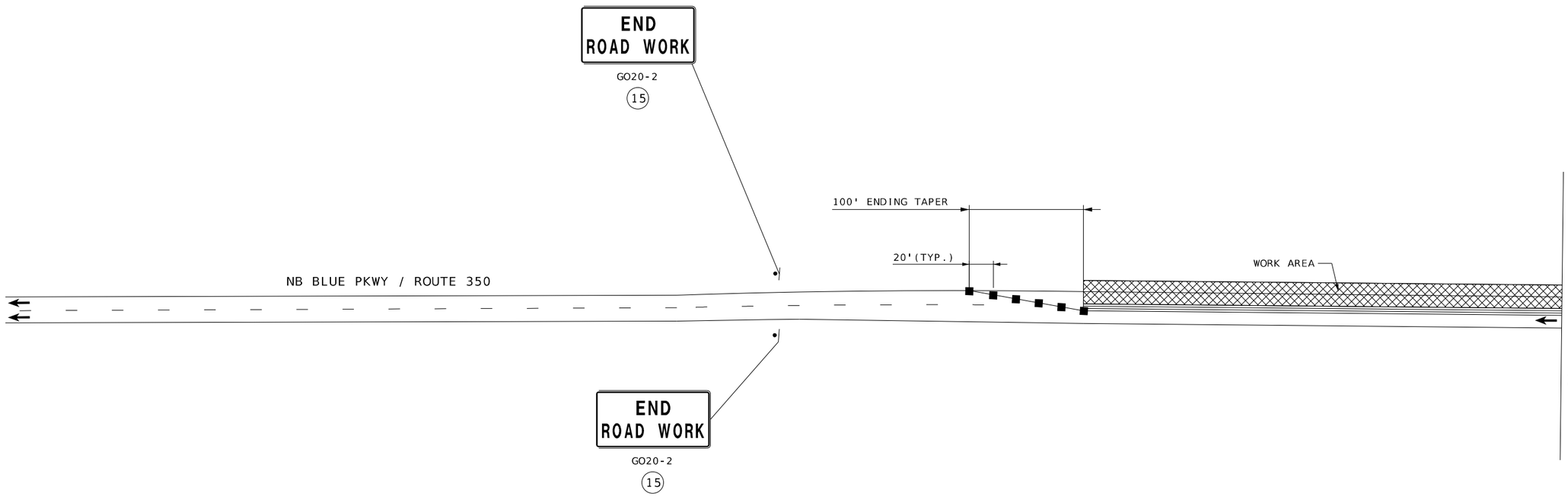
DATE PREPARED: 3/3/2026
ROUTE: VARIOUS | STATE: MO
DISTRICT: KC | SHEET NO.: 51
COUNTY: VARIOUS
JOB NO.: J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6333 PHASE 1
SHEET 42 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 52 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

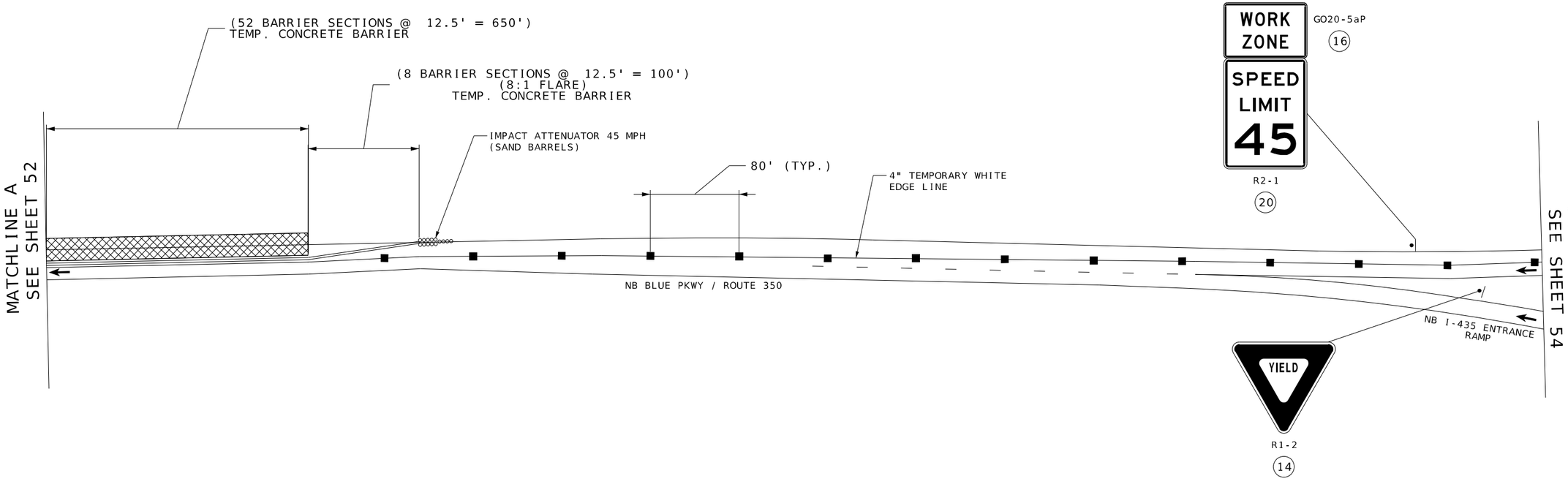
PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SCALE

0 50 100 150

TRAFFIC CONTROL PLAN
BRIDGE A6333 PHASE 1
SHEET 43 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 53 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

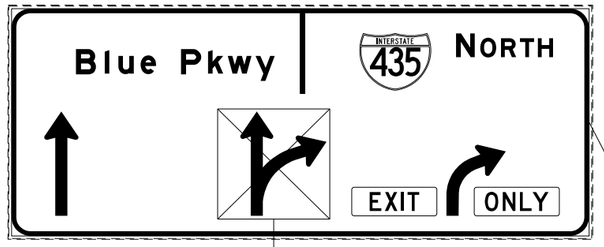
| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

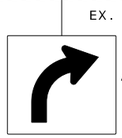
TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

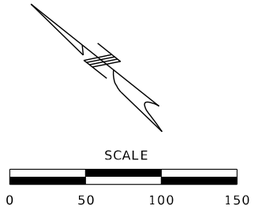
pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2025/KC101/101250103/Road/Plan Sheets/053_TC_01-68_J4P3093_43.dgn 3:15:56 PM 3/3/2026

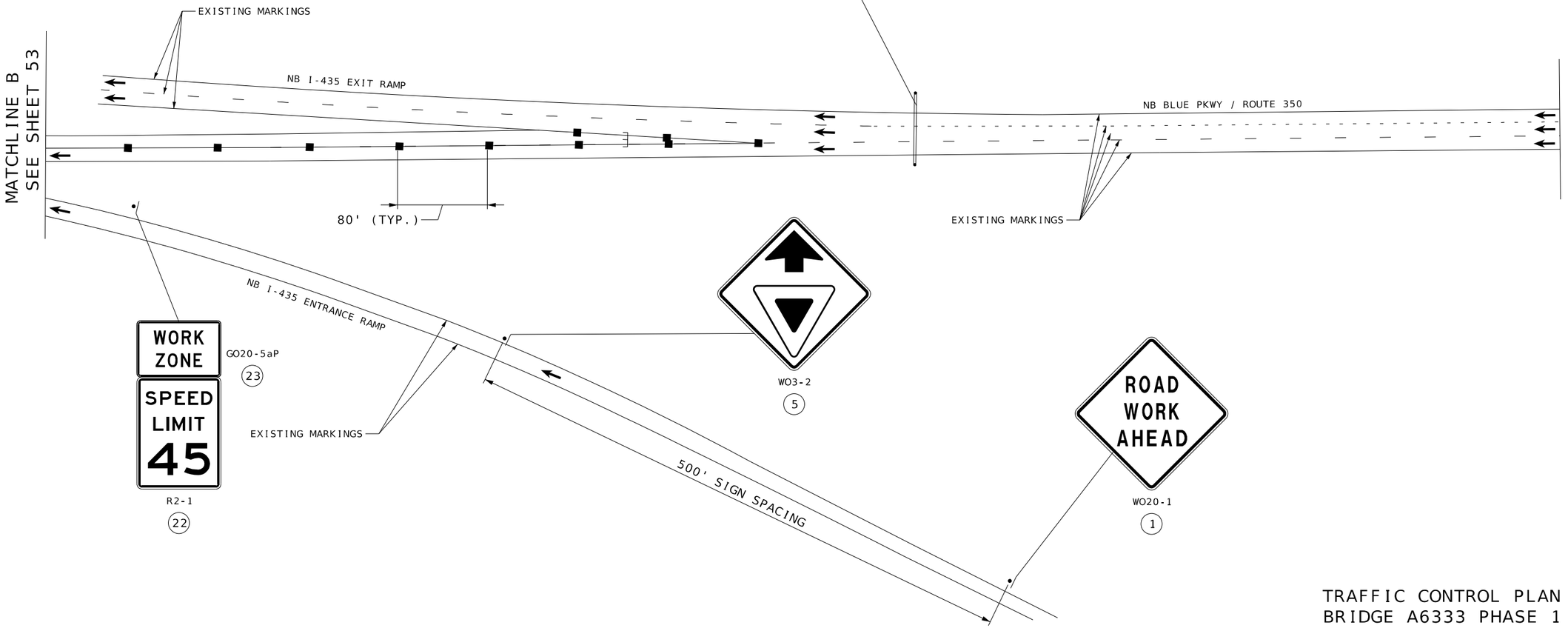



EX. GUIDE SIGN



COVER STRAIGHT ARROW/RIGHT ARROW AND REPLACE RIGHT ARROW ONLY




TRAFFIC CONTROL PLAN
BRIDGE A6333 PHASE 1
SHEET 44 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 54 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

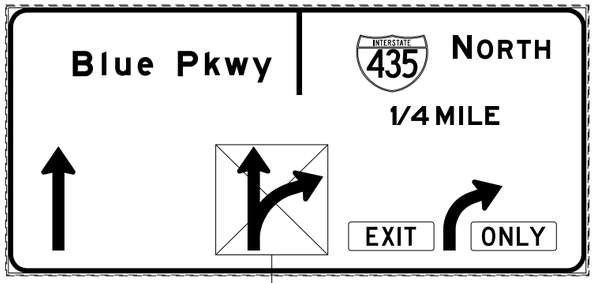
BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

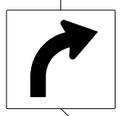
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

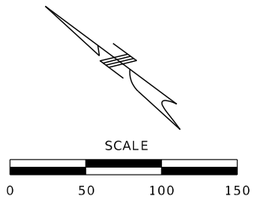
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

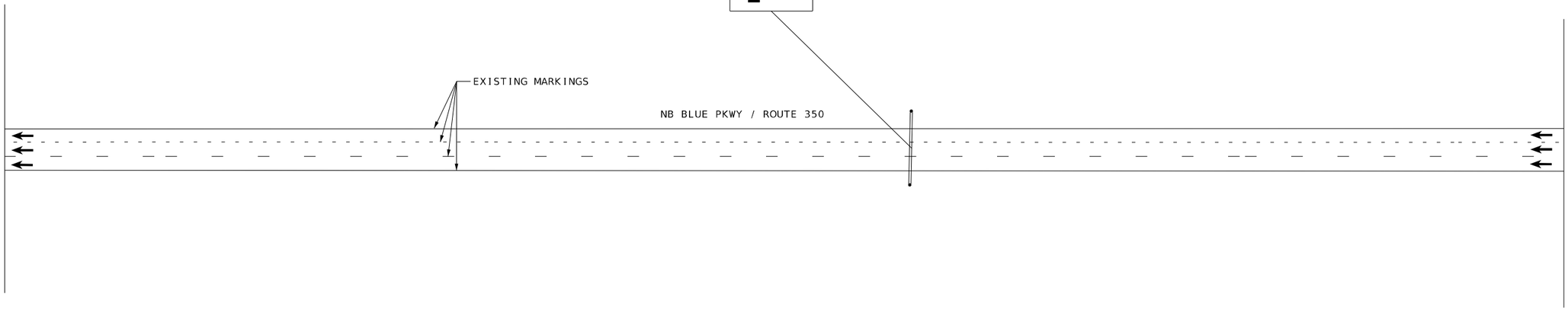



EX. GUIDE SIGN



COVER STRAIGHT ARROW/RIGHT ARROW AND REPLACE RIGHT ARROW ONLY




TRAFFIC CONTROL PLAN
BRIDGE A6333 PHASE 1
SHEET 45 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 55 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

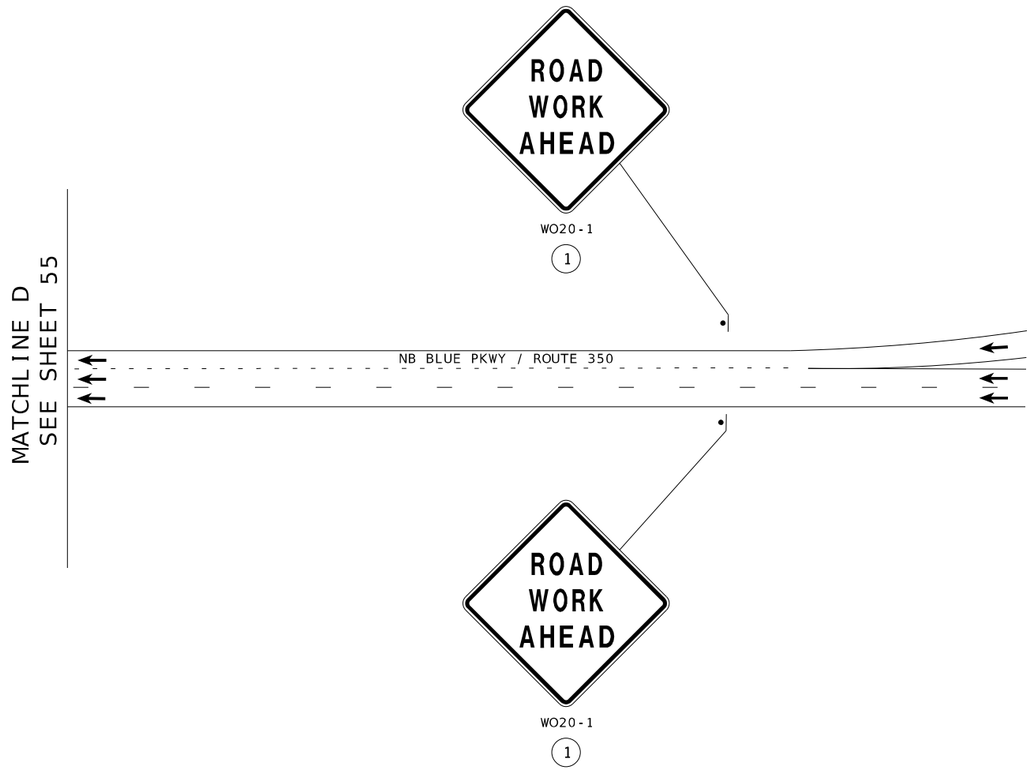
MoDOT

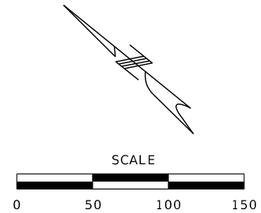
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6333 PHASE 1
SHEET 46 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 56 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

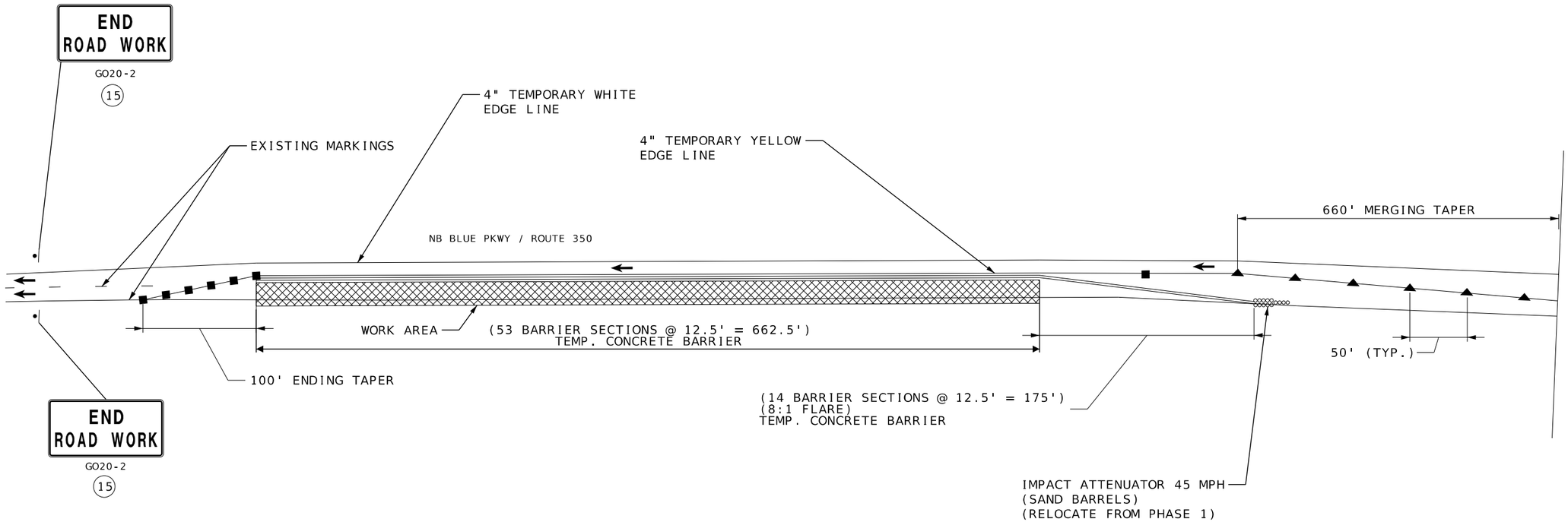
PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SCALE

0 50 100 150

# TRAFFIC CONTROL PLAN
# BRIDGE A6333 PHASE 2
SHEET 47 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 57 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

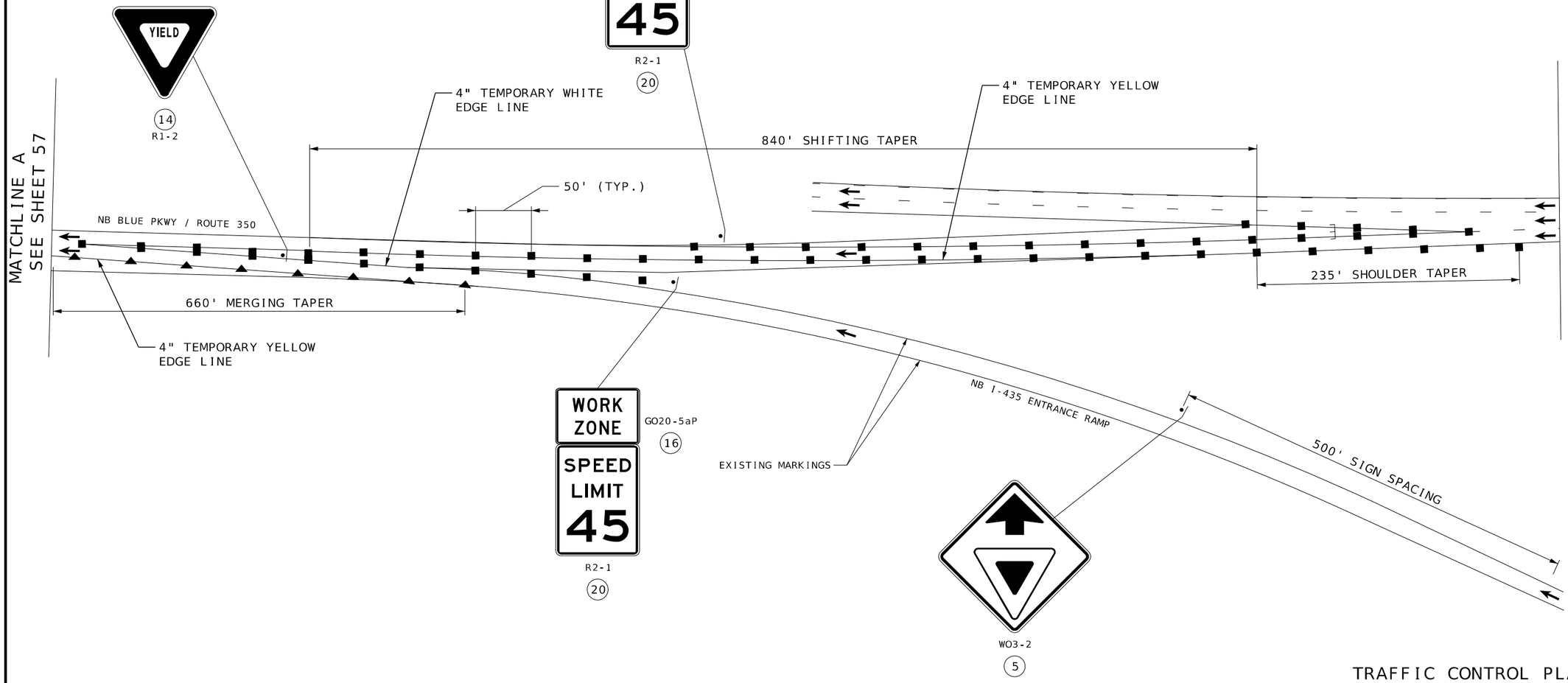
PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SCALE

0 50 100 150

# TRAFFIC CONTROL PLAN
# BRIDGE A6333 PHASE 2
SHEET 48 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED: 3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 58 |

COUNTY: VARIOUS

JOB NO.: J4P3093

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

| DESCRIPTION | DATE |
|---|---|
| | |

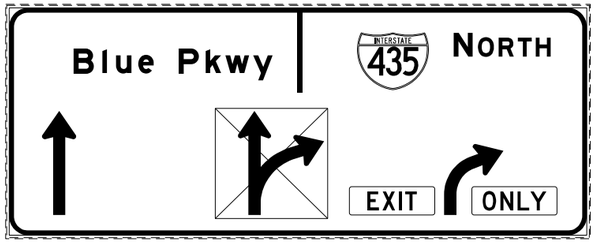
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

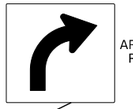
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

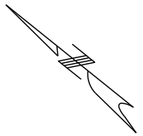
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




EX. GUIDE SIGN



COVER STRAIGHT ARROW/RIGHT ARROW AND REPLACE RIGHT ARROW ONLY



SCALE

0 50 100 150

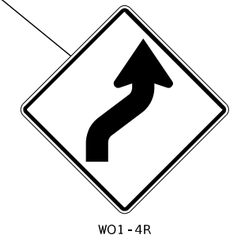
MATCHLINE B
SEE SHEET 58

NB BLUE PKWY / ROUTE 350

1000' SIGN SPACING

EXISTING MARKINGS

MATCHLINE C
SEE SHEET 60



WO1-4R

(23)




(1)

WO20-1

NB I-435 ENTRANCE RAMP

TRAFFIC CONTROL PLAN
BRIDGE A6333 PHASE 2
SHEET 49 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 59 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

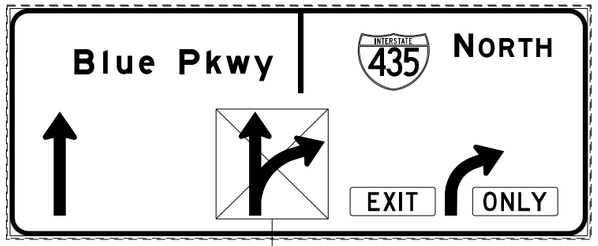
| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING



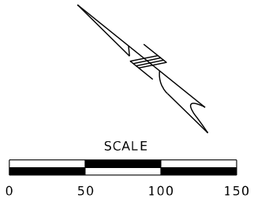

EX. GUIDE SIGN

COVER STRAIGHT ARROW/RIGHT ARROW AND REPLACE RIGHT ARROW ONLY




WO20-1

(1)



SCALE

0 50 100 150

MATCHLINE C
SEE SHEET 59

EXISTING MARKINGS

NB BLUE PKWY / ROUTE 350

NB 63RD STREET ENTRANCE RAMP

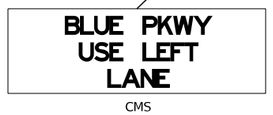
MATCHLINE D
SEE SHEET 61

1000' SIGN SPACING




WO20-1

(1)




CMS

TRAFFIC CONTROL PLAN
BRIDGE A6333 PHASE 2
SHEET 50 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 60 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

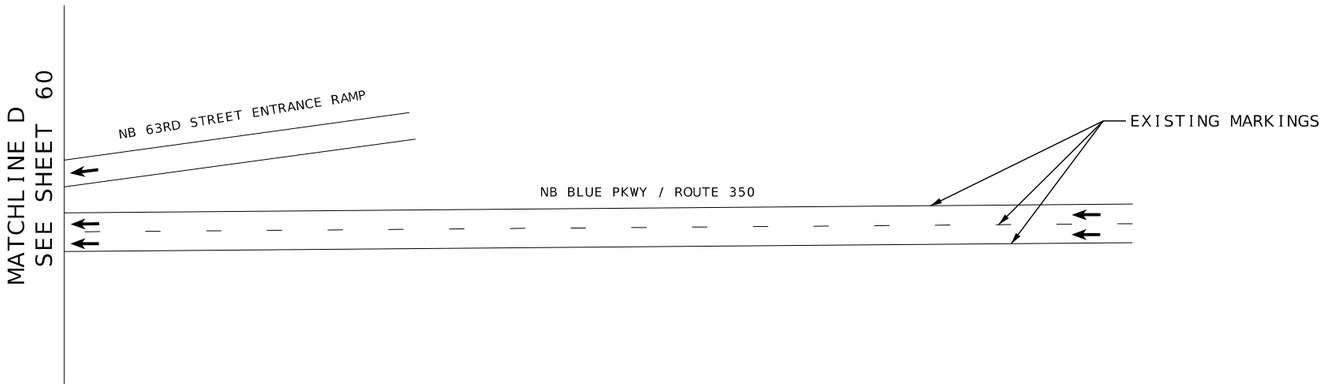
PROJECT NO.

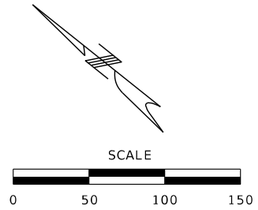
BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6333 PHASE 2
SHEET 51 OF 68




THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 61 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

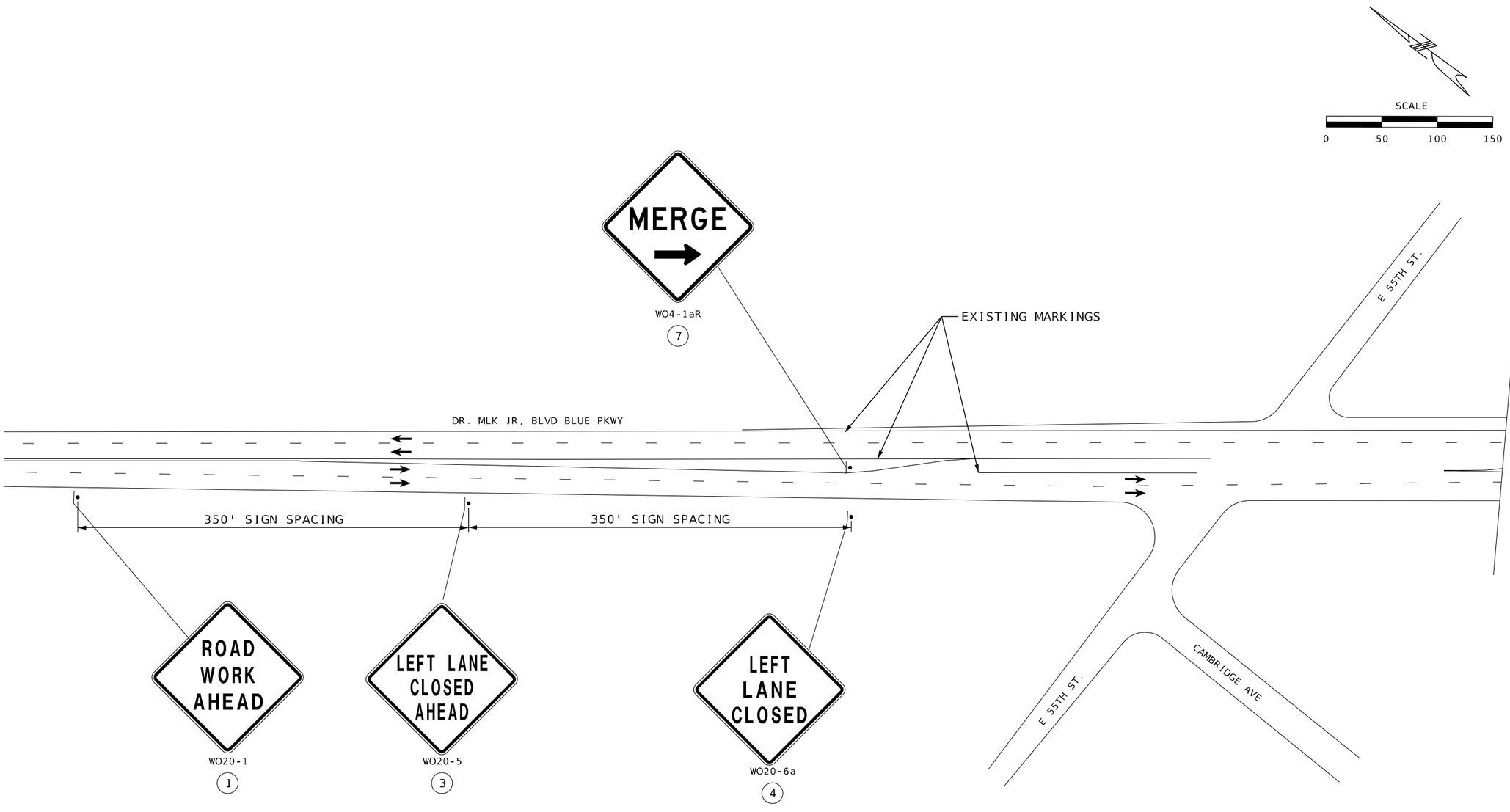
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION




105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6334 PHASE 1
SHEET 52 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 62 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

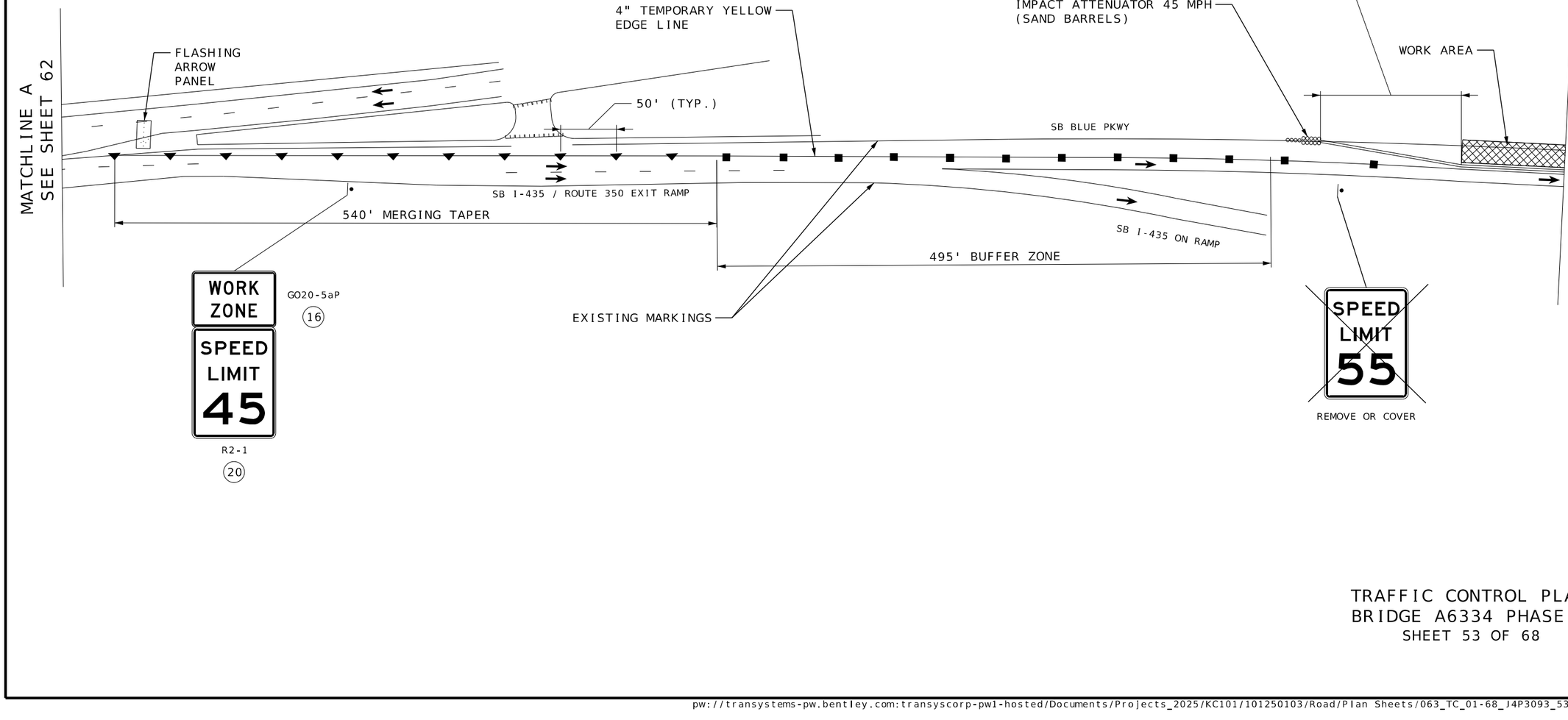
| DESCRIPTION | DATE |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6334 PHASE 1
SHEET 53 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 63 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

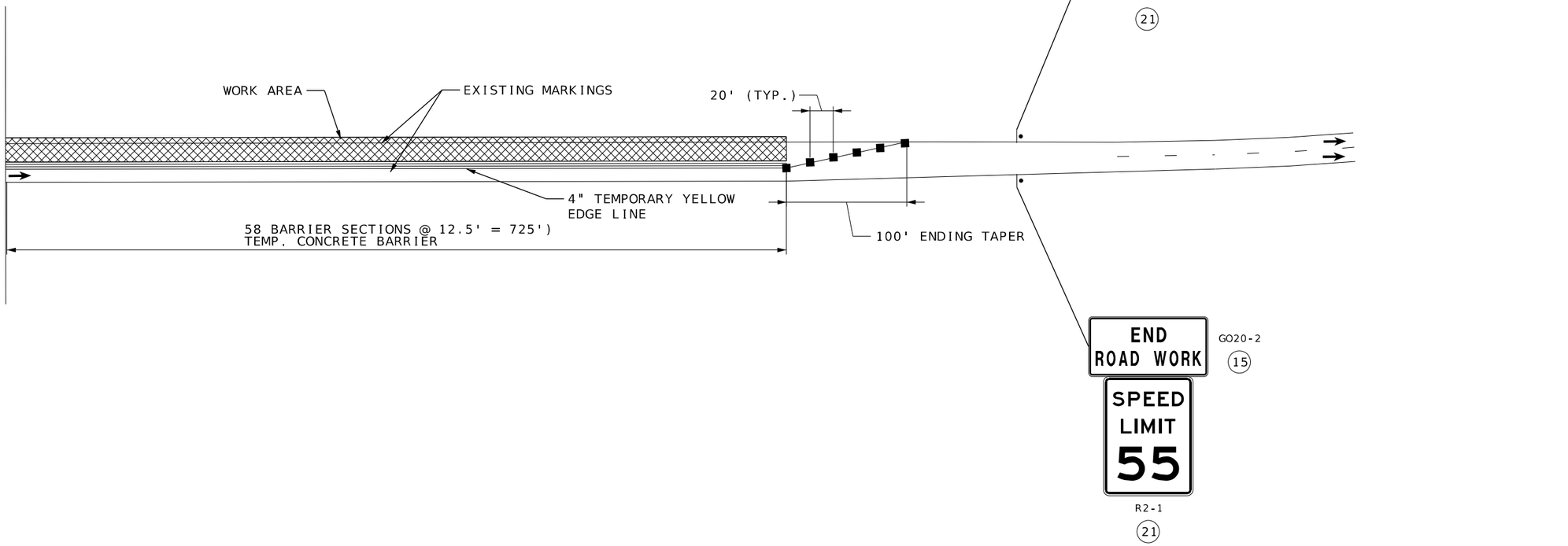
| DESCRIPTION | DATE |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6334 PHASE 1
SHEET 54 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 64 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

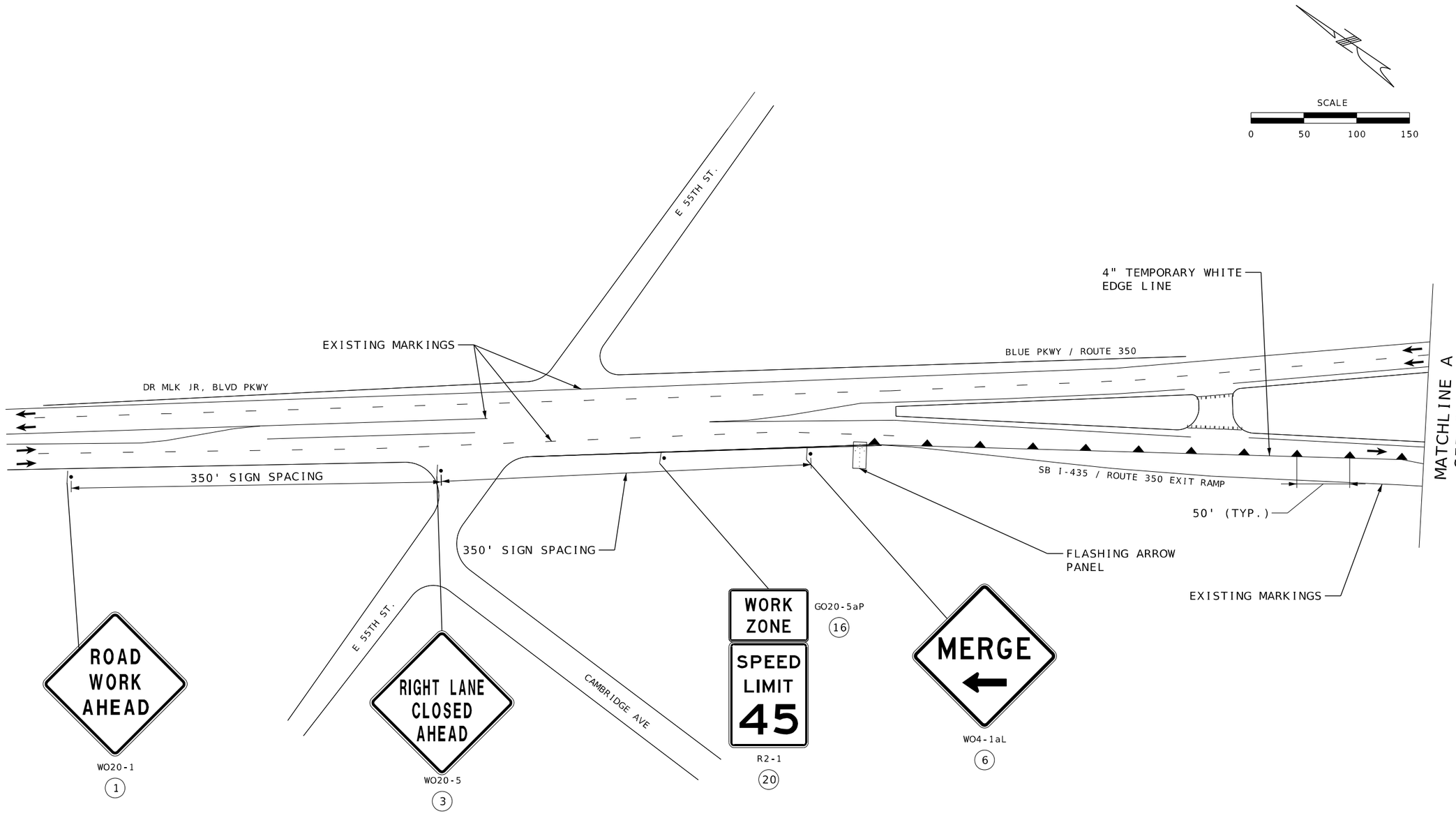
PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6334 PHASE 2
SHEET 55 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 65 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

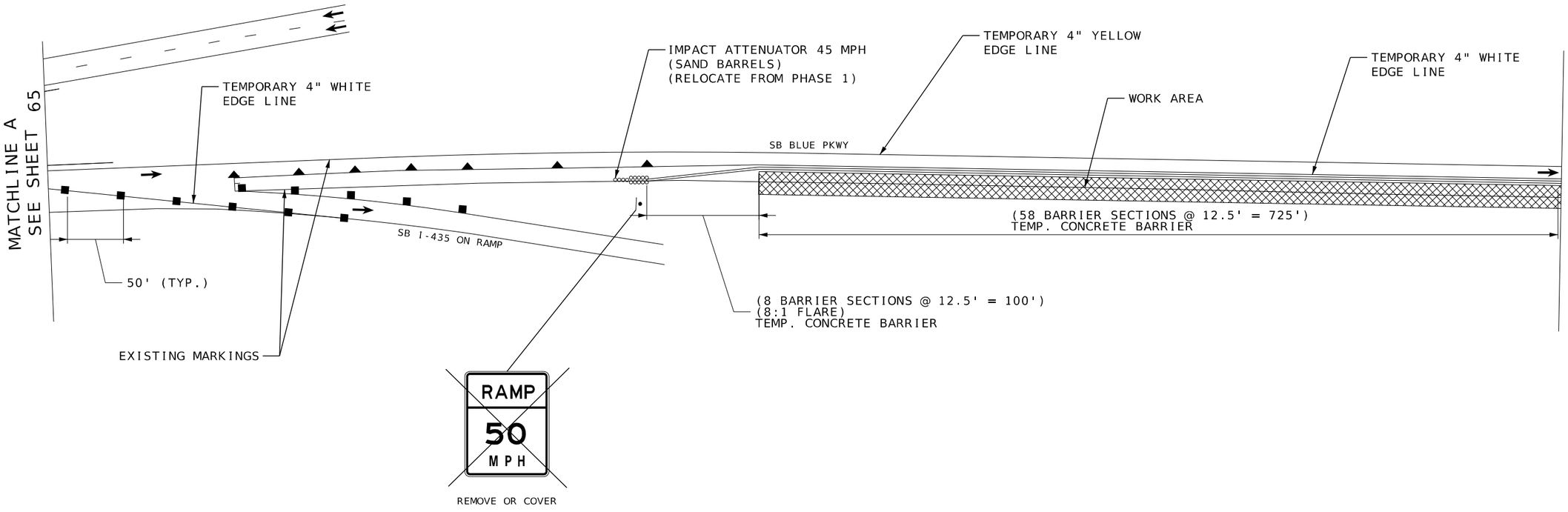
PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SCALE

0 50 100 150

TRAFFIC CONTROL PLAN
BRIDGE A6334 PHASE 2
SHEET 56 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 66 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

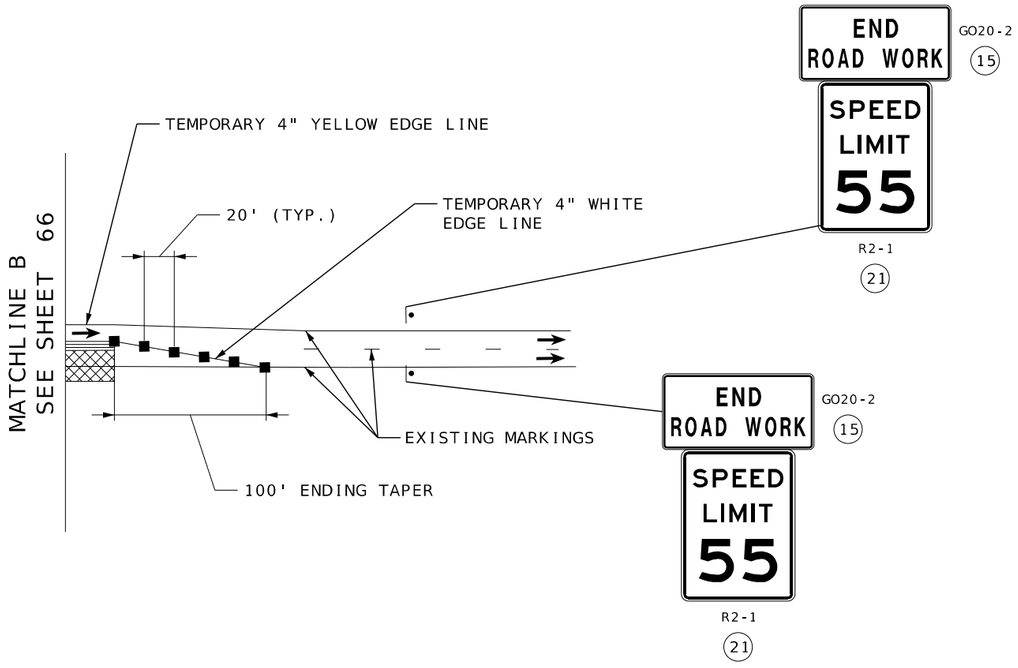
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SCALE

0 50 100 150

TRAFFIC CONTROL PLAN
BRIDGE A6334 PHASE 2
SHEET 57 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 67 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

SCALE

0 50 100 150




WO21-5

25




WO20-1

1




WO20-5

3

1000' SIGN SPACING (NOT TO SCALE)

1000' SIGN SPACING (NOT TO SCALE)

1000' SIGN SPACING (NOT TO SCALE)

50'(TYP.)

SB I-435

SB I-435

EXISTING MARKINGS




WO21-5

25



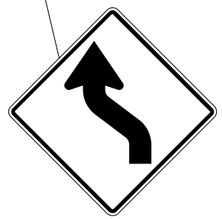

WO20-1

1




WO20-5

3



WO1-4L

24

MATCHLINE A
SEE SHEET 69

TRAFFIC CONTROL PLAN
BRIDGE A6335 PHASE 1
SHEET 58 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 68 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

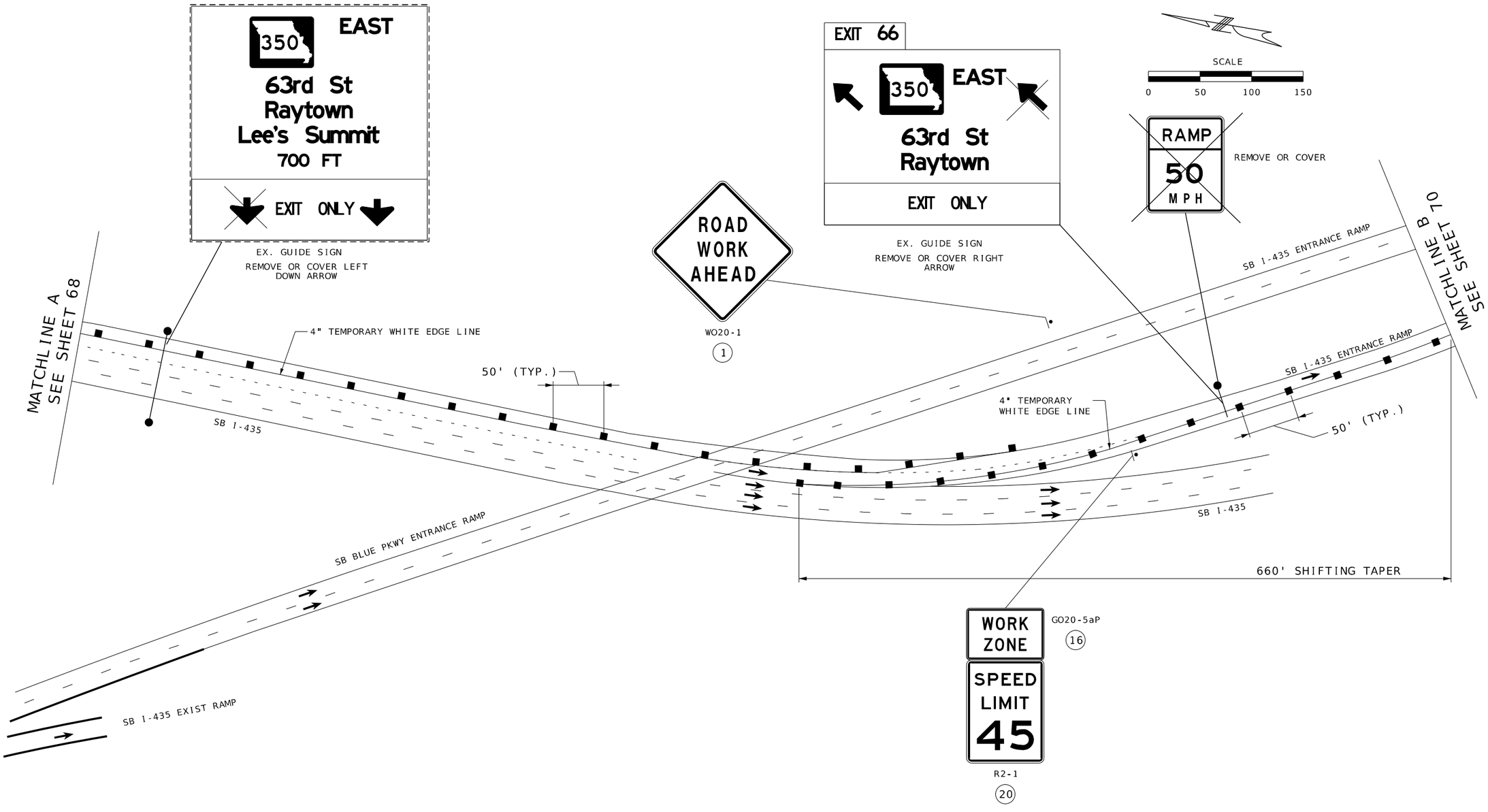
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6335 PHASE 1
SHEET 59 OF 68

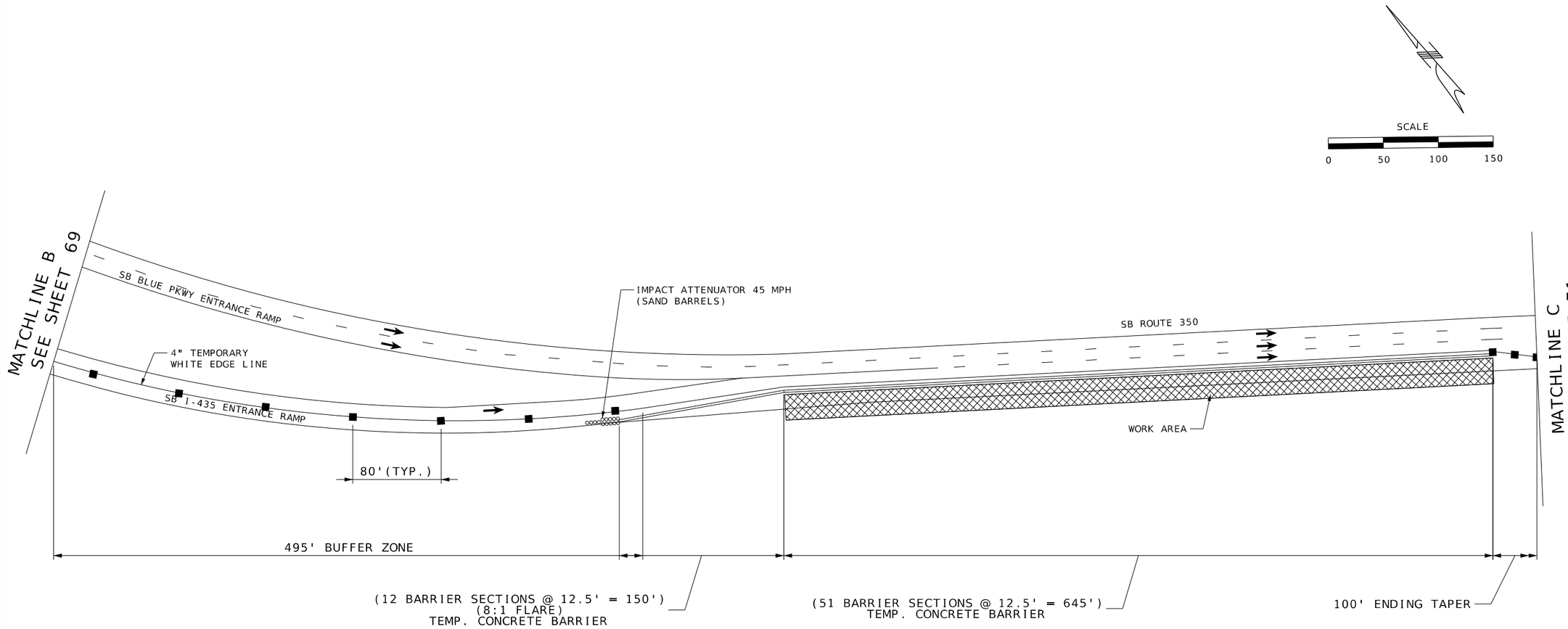
STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 3/3/2026
ROUTE VARIOUS | STATE MO
DISTRICT KC | SHEET NO. 69
COUNTY VARIOUS
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




# TRAFFIC CONTROL PLAN
# BRIDGE A6335 PHASE 1
SHEET 60 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 70 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

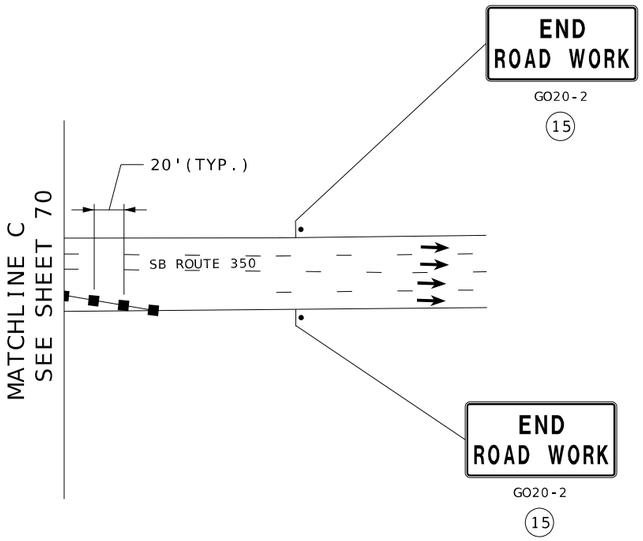
DATE

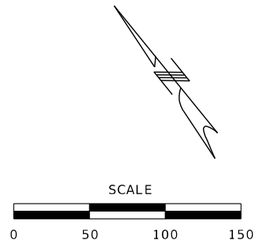
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6335 PHASE 1
SHEET 61 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 71 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

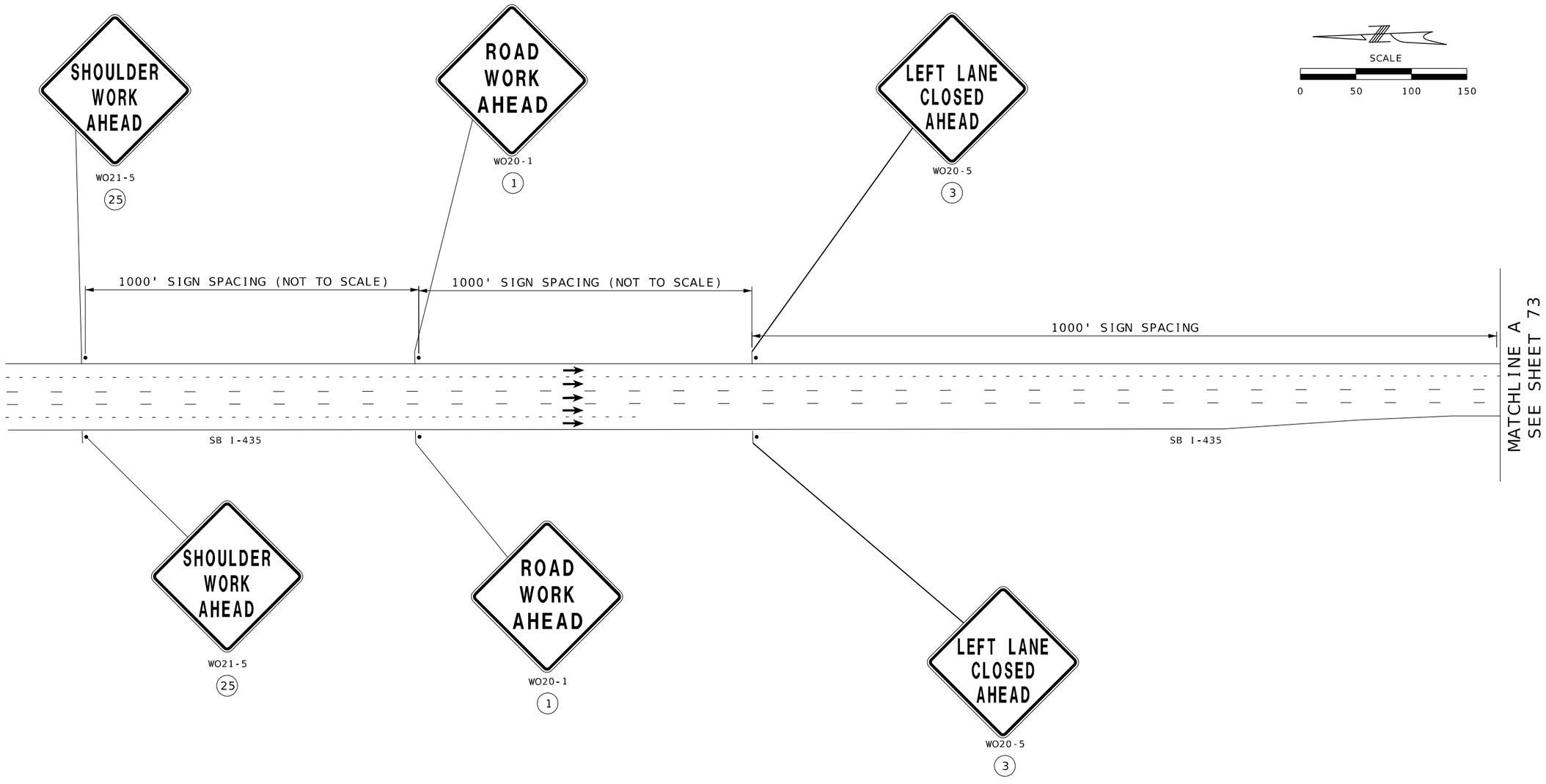
PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SCALE

0 50 100 150

TRAFFIC CONTROL PLAN
BRIDGE A6335 PHASE 2
SHEET 62 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED: 3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |

| DISTRICT | SHEET NO. |
|---|---|
| KC | 72 |

COUNTY: VARIOUS

JOB NO.: J4P3093

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

| DESCRIPTION | DATE |
|---|---|
| | |

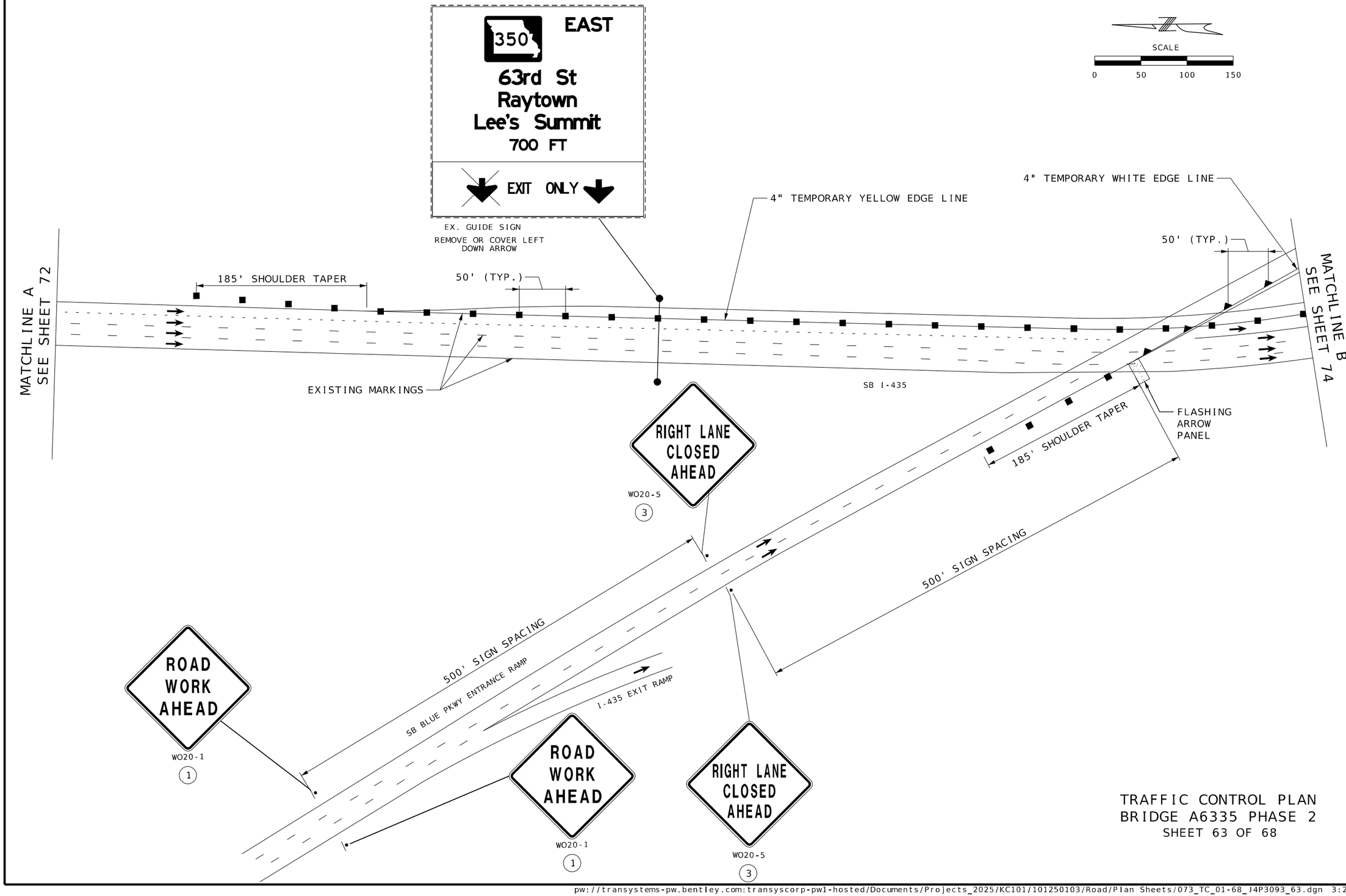
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6335 PHASE 2
SHEET 63 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

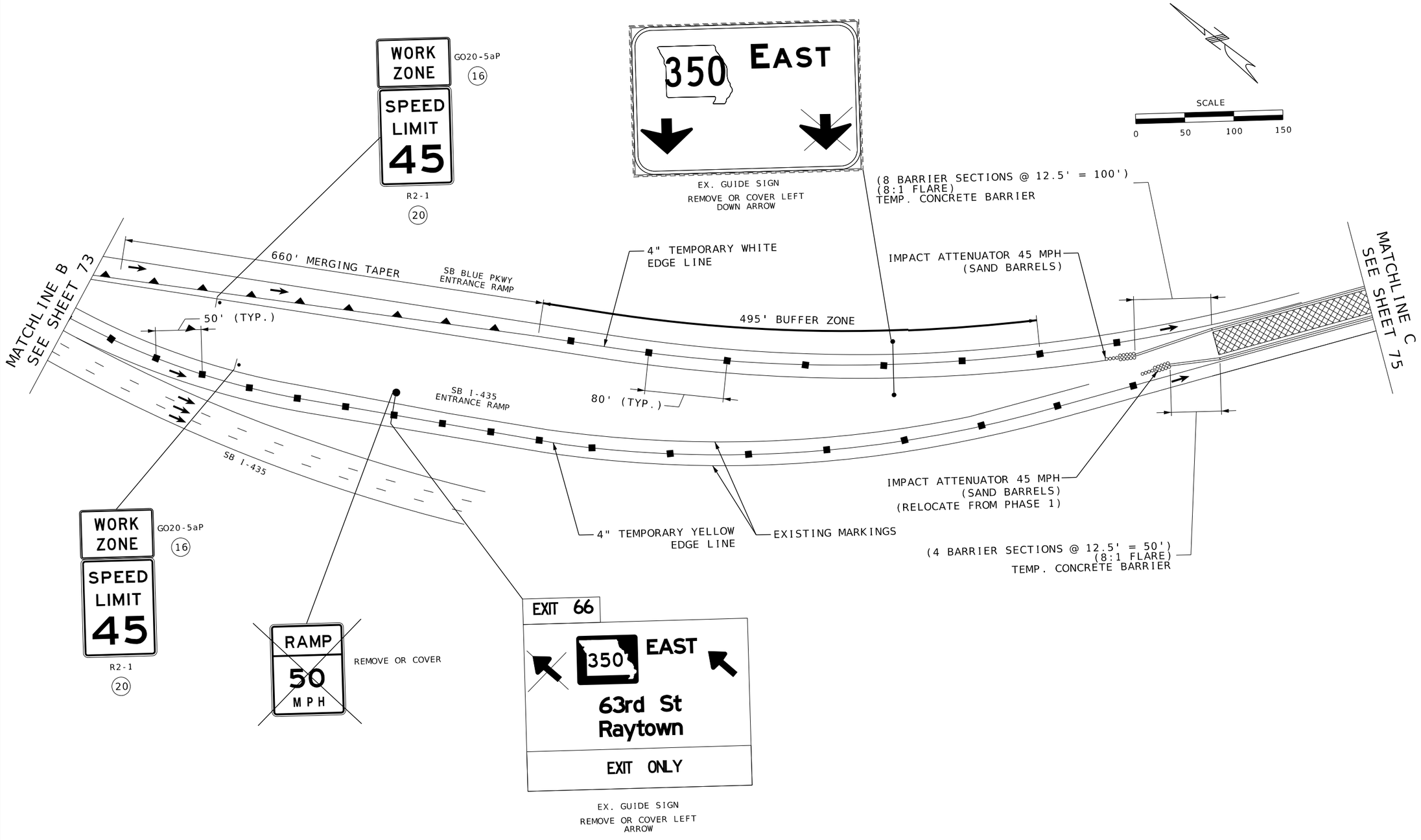
DATE PREPARED: 3/3/2026
ROUTE: VARIOUS | STATE: MO
DISTRICT: KC | SHEET NO.: 73
COUNTY: VARIOUS
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

| DESCRIPTION | DATE |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2025/KC101/101250103/Road/Plan Sheets/073_TC_01-68_J4P3093_63.dgn 3:22:39 PM 3/3/2026




TRAFFIC CONTROL PLAN
BRIDGE A6335 PHASE 2
SHEET 64 OF 68

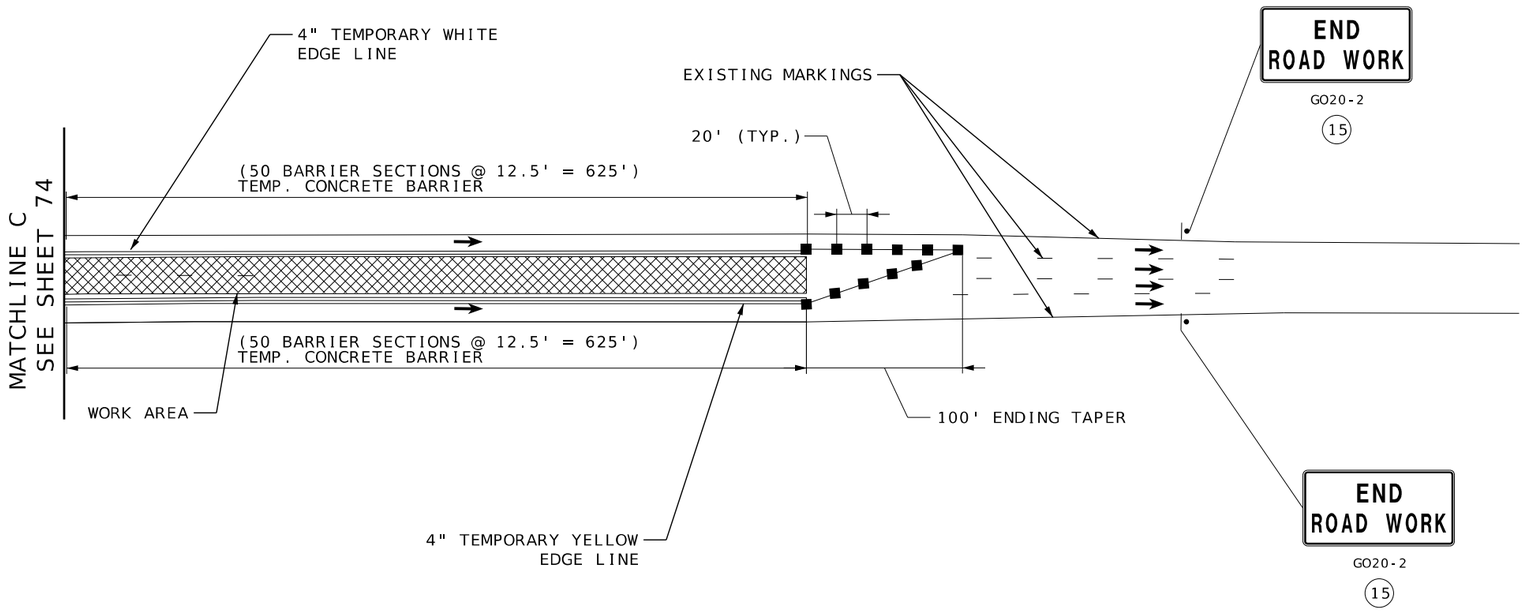

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

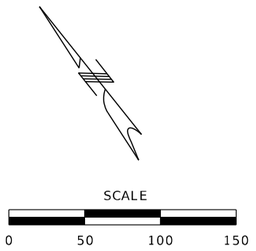

DATE PREPARED: 3/3/2026
ROUTE: VARIOUS | STATE: MO
DISTRICT: KC | SHEET NO.: 74
COUNTY: VARIOUS
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6335 PHASE 2
SHEET 65 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 75 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

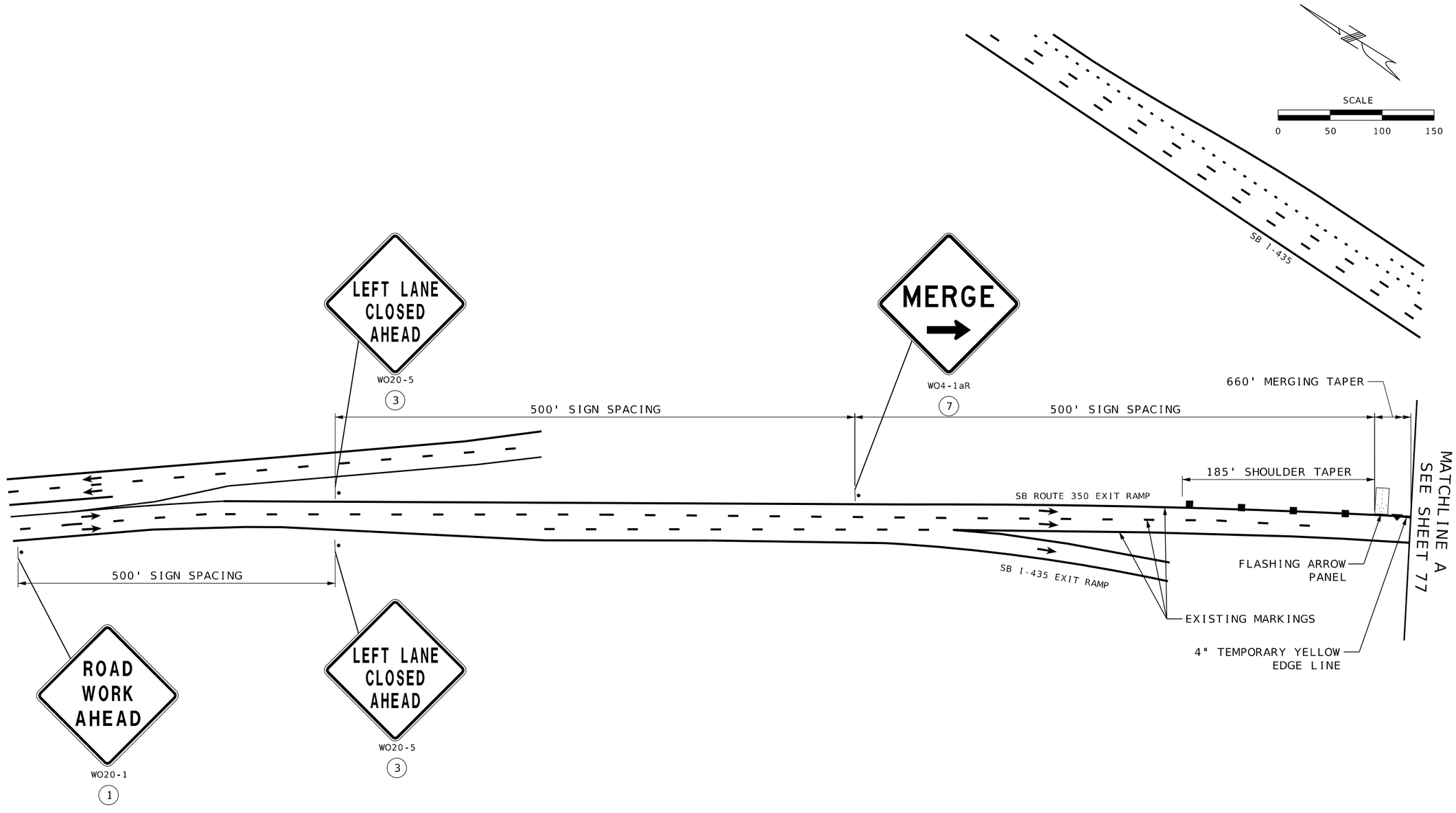
PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




TRAFFIC CONTROL PLAN
BRIDGE A6335 PHASE 3
SHEET 66 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 76 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

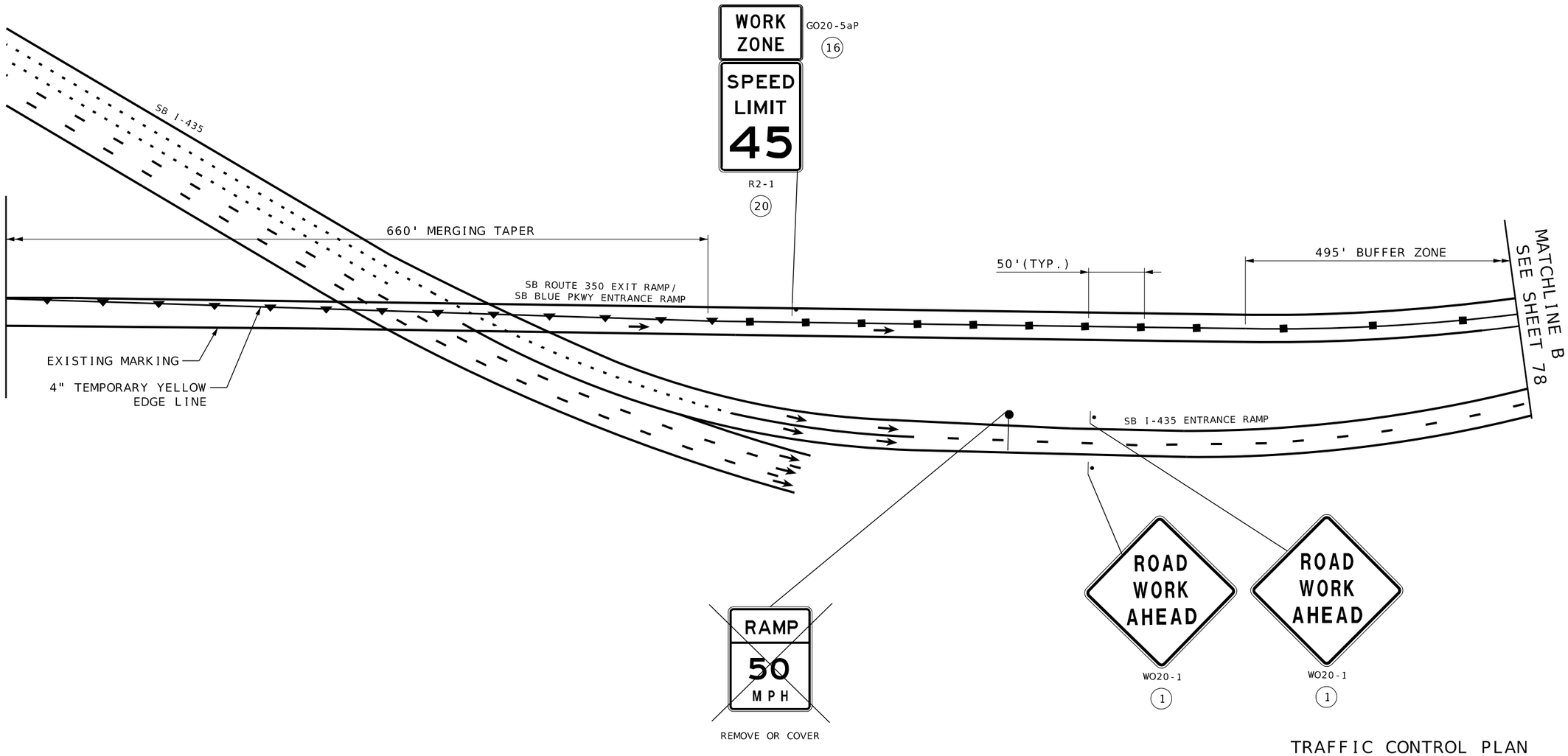
BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SCALE

0 50 100 150

# TRAFFIC CONTROL PLAN
# BRIDGE A6335 PHASE 3
SHEET 67 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |

| DISTRICT | SHEET NO. |
|---|---|
| KC | 77 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

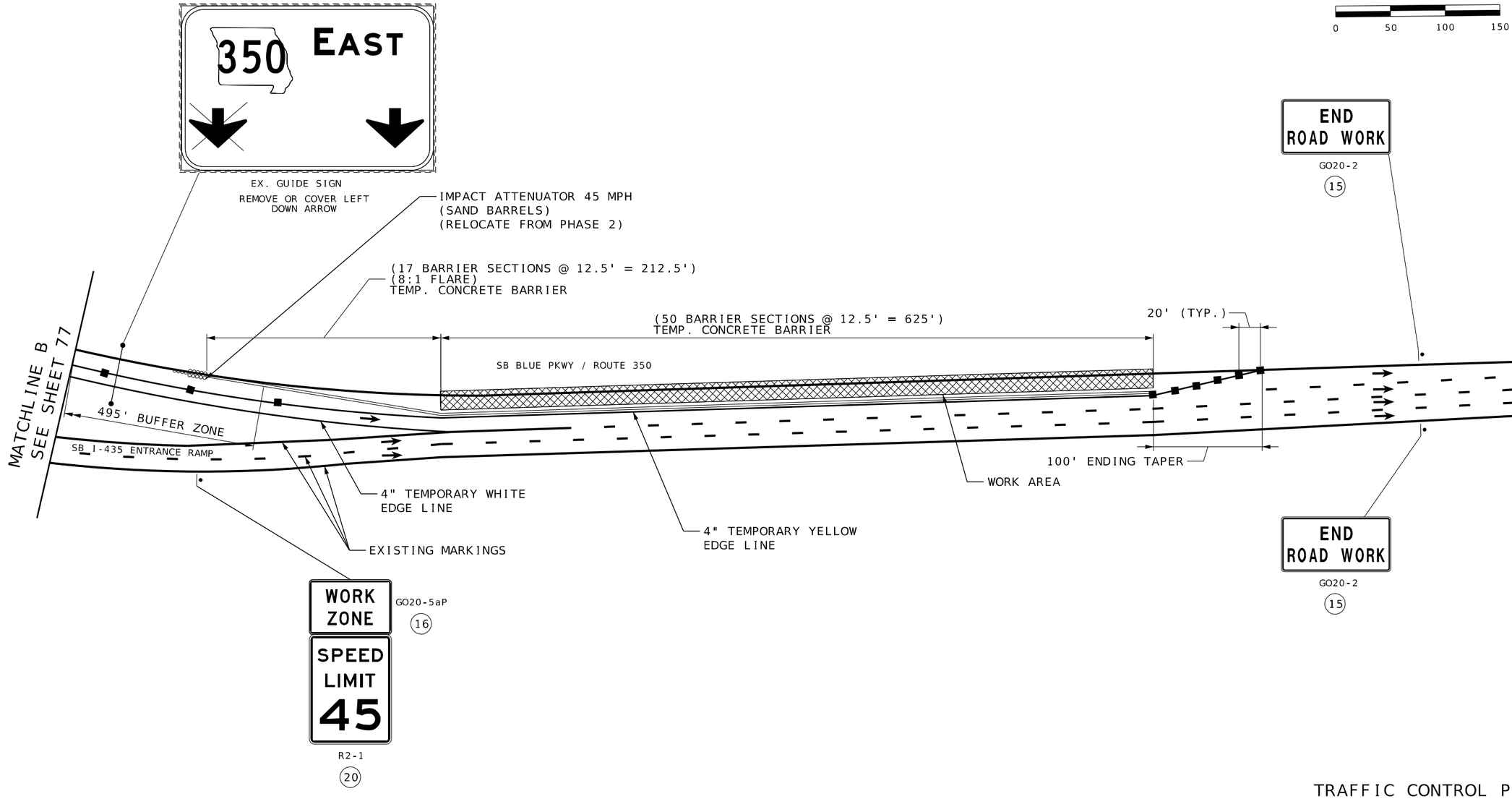
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




# TRAFFIC CONTROL PLAN
# BRIDGE A6335 PHASE 3
SHEET 68 OF 68

STATE OF MISSOURI
MATTHEW P. PARKER
NUMBER PE-2011009043
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/3/2026

| ROUTE | STATE |
|---|---|
| VARIOUS | MO |
| DISTRICT | SHEET NO. |
| KC | 78 |

COUNTY
VARIOUS

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

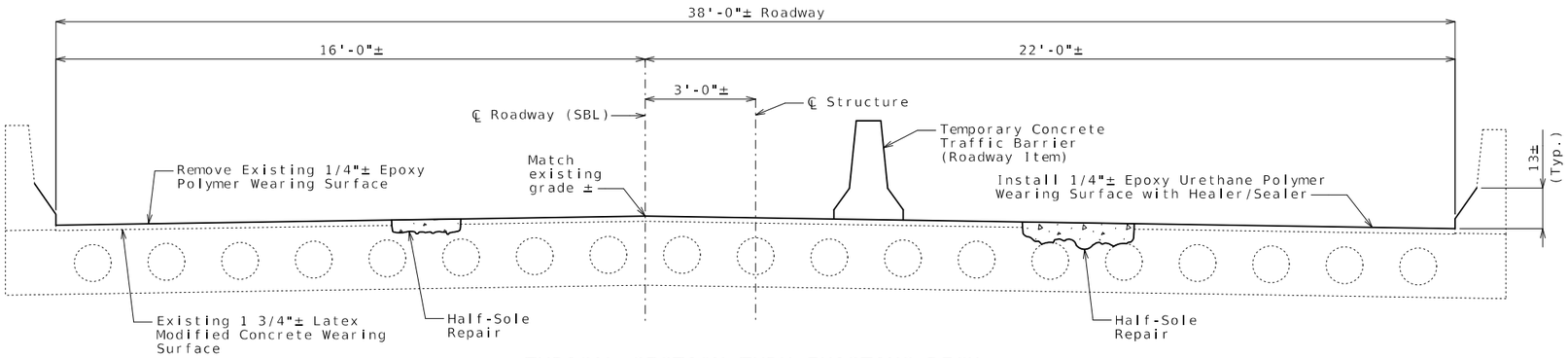
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

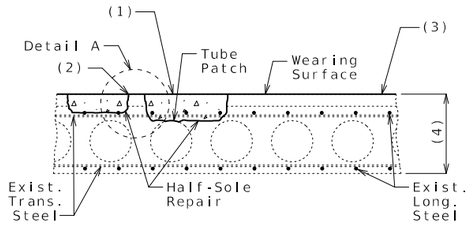
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

SEC/SUR 15 TWP 52N RGE 34W

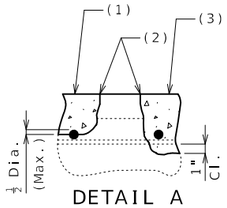
# U.I.P. AND REHABILITATE EXISTING (39'-49'-39') CONTINUOUS CONCRETE VOIDED SLAB SPANS




TYPICAL SECTION THRU EXISTING DECK




HALF-SOLE REPAIR




DETAIL A

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

(1) Removal of existing 1/4"± epoxy polymer wearing surface.

(2) 1" vertical side shall be established outside the deteriorated area.

(3) 1/4" minimum epoxy urethane polymer wearing surface with healer/sealer.

(4) Original depth minus previous scarification plus existing 1 3/4"± Latex Modified Concrete Wearing Surface.

## Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Seal Coat or Polymer Wearing Surface | sq. foot | 4,921 |
| Epoxy Urethane Polymer Wearing Surface with Healer/Sealer | sq. yard | 585 |
| Half-Sole Repair | sq. foot | 50 |
| | | |
| | | |
| | | |
| | | |

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 5

**Design Loading:**

HS20-44 Modified (1965) and Military 24,000 lb Tandem Axle (1965)

**Design Unit Stresses:**

Class B-1 Concrete (Half-Sole Repair) f'c = 4,000 psi

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Polymer and aggregate shall be applied to bridge deck and 16" up along roadway face of barrier (13"± vertical height). Aggregate shall be light colored.

The contractor shall exercise care to ensure spillage over joint edges is prevented and that a neat line is obtained along any terminating edge of the wearing surface.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

**Traffic Handling:**

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

## REPAIRS TO BRIDGE: ROUTE I-29 SB OVER TODD CREEK

ROUTE I-29 FROM ROUTE I-435 TO ROUTE 152
ABOUT 2.6 MILES SOUTHWEST OF ROUTE 152
BEGINNING STATION 369+77.25± (Match Existing)

Detailed Sep. 2025
Checked Oct. 2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
TYLER R. LINDSAY
NUMBER PE-2019000128
PROFESSIONAL ENGINEER
02/23/2026 11:38:45 AM
TYLER R. LINDSAY - CIVIL
MO-PE-2019000128

DATE PREPARED
2/23/2026

| ROUTE | STATE |
|---|---|
| I-29 | MO |
| DISTRICT | SHEET NO. |
| BR | 1 |

COUNTY
PLATTE

JOB NO.
J4P3093

CONTRACT ID.

PROJECT NO.

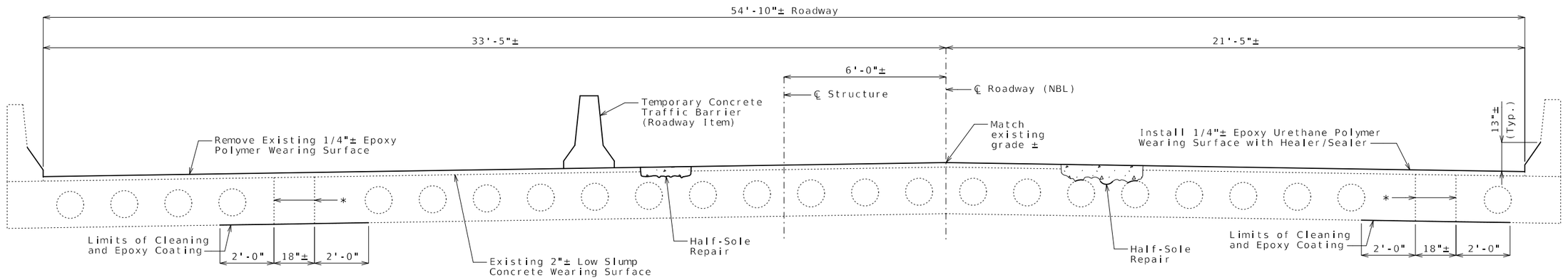
BRIDGE NO.
A17445

| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SEC/SUR 15 TWP 52N RGE 34W

# U.I.P. AND REHABILITATE EXISTING (39'-49'-39') CONTINUOUS CONCRETE VOIDED SLAB SPANS

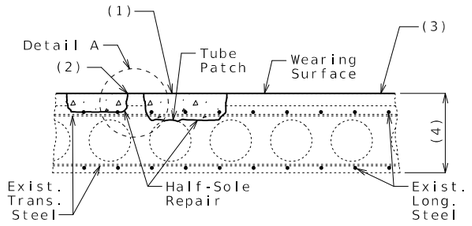



## TYPICAL SECTION THRU EXISTING DECK

* Existing const. jt.

## Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Seal Coat or Polymer Wearing Surface | sq. foot | 7,101 |
| Epoxy Urethane Polymer Wearing Surface with Healer/Sealer | sq. yard | 827 |
| Half-Sole Repair | sq. foot | 50 |
| Cleaning and Epoxy Coating | sq. foot | 1,425 |
| | | |
| | | |
| | | |
| | | |



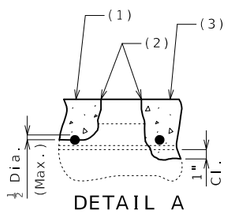

HALF-SOLE REPAIR

(1) Removal of existing 1/4"± epoxy polymer wearing surface.

(2) 1" vertical side shall be established outside the deteriorated area.

(3) 1/4" minimum epoxy urethane polymer wearing surface with healer/sealer.

(4) Original depth minus previous scarification plus existing 2"± Low Slump Concrete Wearing Surface.




DETAIL A

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 5

**Design Loading:**

HS20-44 Modified (1965) and Military 24,000 lb Tandem Axle (1965)

**Design Unit Stresses:**

Class B-1 Concrete (Half-Sole Repair) f'c = 4,000 psi

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Polymer and aggregate shall be applied to bridge deck and 16" up along roadway face of barrier (13"± vertical height). Aggregate shall be light color.

The contractor shall exercise care to ensure spillage over joint edges is prevented and that a neat line is obtained along any terminating edge of the wearing surface.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

**Traffic Handling:**

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

## REPAIRS TO BRIDGE: ROUTE I-29 NB OVER TODD CREEK

ROUTE I-29 FROM ROUTE 152 to ROUTE I-435
ABOUT 2.6 MILES SOUTHWEST OF ROUTE I-435
BEGINNING STATION 369+77.25± (Match Existing)

Detailed Sep. 2025
Checked Oct. 2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
TYLER R. LINDSAY
NUMBER PE-2019000128
PROFESSIONAL ENGINEER
02/23/2026 11:38:35 AM
TYLER R. LINDSAY - CIVIL
MO-PE-2019000128

DATE PREPARED 2/23/2026

| ROUTE | STATE |
|---|---|
| I-29 | MO |
| DISTRICT | SHEET NO. |
| BR | 1 |

COUNTY PLATTE

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

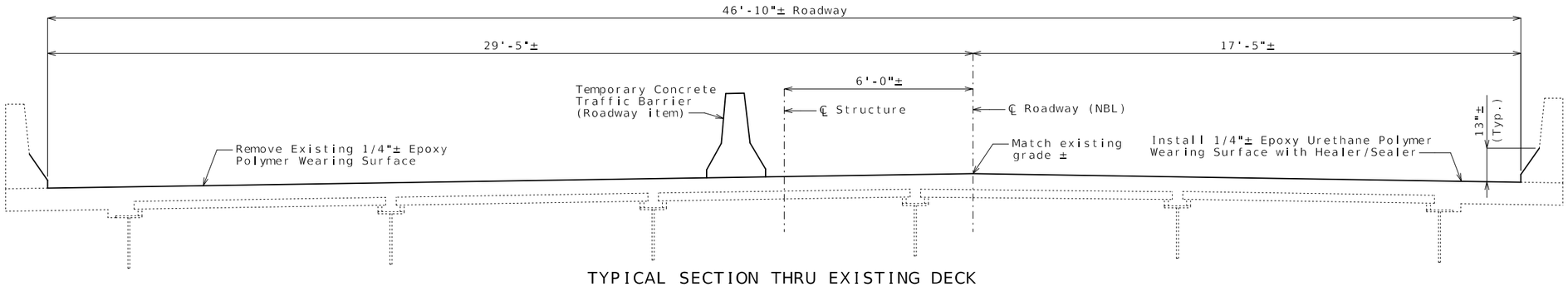
BRIDGE NO. A17446

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SEC/SUR 3 TWP 51N RGE 33W

# U.I.P. AND REHABILITATE EXISTING (116'-123') CONTINUOUS COMPOSITE PLATE GIRDER SPANS (SKEW: 21°14'00" R.A.)




TYPICAL SECTION THRU EXISTING DECK

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 6

**Design Loading:**

HS20-44 Modified (1989) and Military 24,000 lb Tandem Axle (1989)

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Polymer and aggregate shall be applied to bridge deck, semi-deep abutment slabs and 16" up along roadway face of barrier (13"± vertical height). Aggregate shall be light colored.

The contractor shall exercise care to ensure spillage over joint edges is prevented and that a neat line is obtained along any terminating edge of the wearing surface.

**Open Cell Foam Joint:**

Open cell foam joint seal size (width and depth) shall be determined by the manufacturer. Manufacturer recommended seal size shall meet the movement and installation gap requirements and skew effect.

The open cell foam joint seal shall be installed according to the manufacturer's recommendations.

The installation temperature shall be taken as the actual air temperature averaged over the 24-hours period immediately preceding installation.

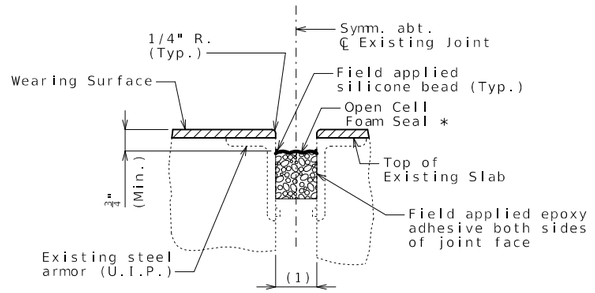
(1) Allowed installation gap (±) normal to joint at roadway surface (see table).

**Traffic Handling:**

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

## Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Seal Coat or Polymer Wearing Surface | sq. foot | 13,581 |
| Removal of Existing Expansion Joint Seal or Sealant | linear foot | 100 |
| Epoxy Urethane Polymer Wearing Surface with Healer/Sealer | sq. yard | 1,595 |
| Open Cell Foam Joint Seal | linear foot | 100 |
| | | |
| | | |
| | | |
| | | |




SECTION THRU JOINT
AT END BENTS NO. 1 & 3

SKEW = 21°14'00" R.A.

* Manufacturer's recommended size

Extend seal 3" past edges of slab.

| Location | Movement Parallel to Rdwy | Movement Normal to Joint | Min. Jt. Width (Normal to Joint) | Max. Jt. Width (Normal to Joint) | (1) Allowed Installation Gap (±) Normal to Joint at Roadway Surface at Air/Surface Temperature | | | | Manufacturer | Seal Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | @ 40°F | @ 50°F | @ 60°F | @ 70°F | | |
| End Bents No. 1 & 3 | 1.59" | 1.48" | 2.03" | 3.51" | $2\frac{13}{16}$" | $2\frac{3}{4}$" | $2\frac{5}{8}$" | $2\frac{1}{2}$" | | |

MoDOT construction personnel will record the manufacturer and seal name that was used.

## REPAIRS TO BRIDGE: ROUTE 169 NB OVER ROUTE 152

ROUTE 169 FROM ROUTE I-29 TO ROUTE I-435
ABOUT 3.5 MILES SOUTH OF ROUTE I-435
BEGINNING STATION 184+99.53± (Match Existing)

Detailed Sep. 2025
Checked Oct. 2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
TYLER R. LINDSAY
NUMBER PE-2019000128
PROFESSIONAL ENGINEER
02/23/2026 11:39:10 AM
TYLER R. LINDSAY - CIVIL
MO-PE-2019000128

DATE PREPARED 2/23/2026

| ROUTE | STATE |
|---|---|
| 169 | MO |
| DISTRICT | SHEET NO. |
| BR | 1 |

COUNTY CLAY

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

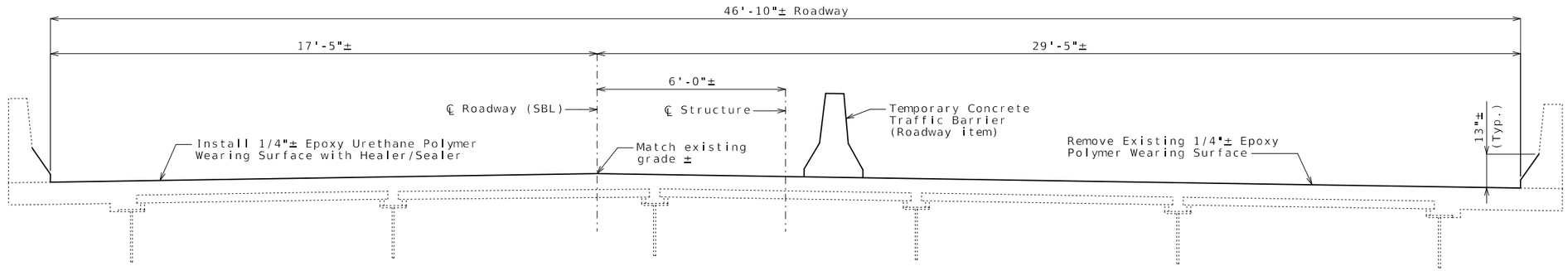
BRIDGE NO. A35273

| DESCRIPTION | DATE |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SEC/SUR 3 TWP 51N RGE 33W

# U.I.P. AND REHABILITATE EXISTING (116'-123') CONTINUOUS COMPOSITE PLATE GIRDER SPANS (SKEW: 21°14'00" R.A.)




TYPICAL SECTION THRU EXISTING DECK

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 6

**Design Loading:**

HS20-44 Modified (1989) and Military 24,000 lb Tandem Axle (1989)

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Polymer and aggregate shall be applied to bridge deck, semi-deep abutment slabs and 16" up along roadway face of barrier (13"± vertical height). Aggregate shall be light colored.

The contractor shall exercise care to ensure spillage over joint edges is prevented and that a neat line is obtained along any terminating edge of the wearing surface.

**Open Cell Foam Joint:**

Open cell foam joint seal size (width and depth) shall be determined by the manufacturer. Manufacturer recommended seal size shall meet the movement and installation gap requirements and skew effect.

The open cell foam joint seal shall be installed according to the manufacturer's recommendations.

The installation temperature shall be taken as the actual air temperature averaged over the 24-hours period immediately preceding installation.

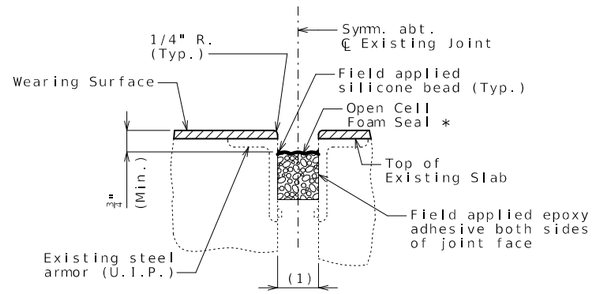
(1) Allowed installation gap (±) normal to joint at roadway surface (see table).

**Traffic Handling:**

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

## Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Seal Coat or Polymer Wearing Surface | sq. foot | 13,581 |
| Removal of Existing Expansion Joint Seal or Sealant | linear foot | 100 |
| Epoxy Urethane Polymer Wearing Surface with Healer/Sealer | sq. yard | 1,595 |
| Open Cell Foam Joint Seal | linear foot | 100 |
| | | |
| | | |
| | | |
| | | |




SECTION THRU JOINT
AT END BENTS NO. 1 & 3

SKEW = 21°14'00" R.A.
* Manufacturer's recommended size
Extend seal 3" past edges of slab.

| Location | Movement Parallel to Rdwy | Movement Normal to Joint | Min. Jt. Width (Normal to Joint) | Max. Jt. Width (Normal to Joint) | (1) Allowed Installation Gap (±) Normal to Joint at Roadway Surface at Air/Surface Temperature | | | | Manufacturer | Seal Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | @ 40°F | @ 50°F | @ 60°F | @ 70°F | | |
| End Bents No. 1 & 3 | 1.59" | 1.48" | 2.03" | 3.51" | $2\frac{13}{16}$" | $2\frac{3}{4}$" | $2\frac{5}{8}$" | $2\frac{1}{2}$" | | |

MoDOT construction personnel will record the manufacturer and seal name that was used.

## REPAIRS TO BRIDGE: ROUTE 169 SB OVER ROUTE 152

ROUTE 169 FROM ROUTE I-435 TO ROUTE I-29
ABOUT 3.5 MILES SOUTH OF ROUTE I-435
BEGINNING STATION 185+32.17± (Match Existing)

Detailed Sep. 2025
Checked Oct. 2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
TYLER R. LINDSAY
NUMBER PE-2019000128
PROFESSIONAL ENGINEER
02/23/2026 11:39:21 AM
TYLER R. LINDSAY - CIVIL
MO-PE-2019000128

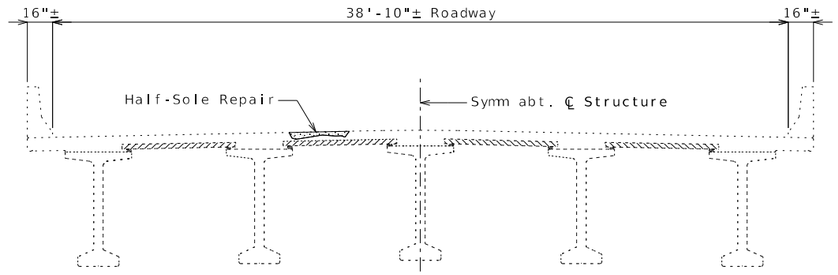
DATE PREPARED 2/23/2026
ROUTE 169 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY CLAY
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A35283

DESCRIPTION | DATE

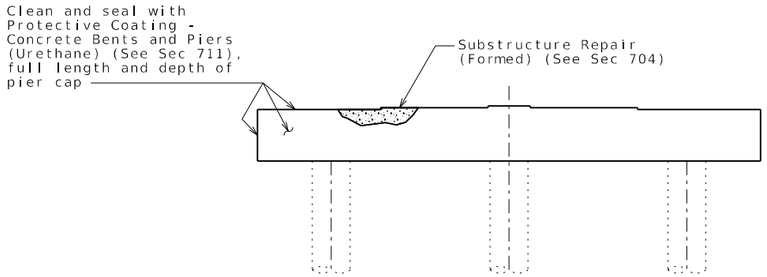
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SEC/SUR 25 TWP 53N RGE 35W

# U.I.P. AND REHABILITATE EXISTING
# (100'-115'-115')(4 @ 115') PRESTRESSED CONCRETE BULB-TEE GIRDER SPANS

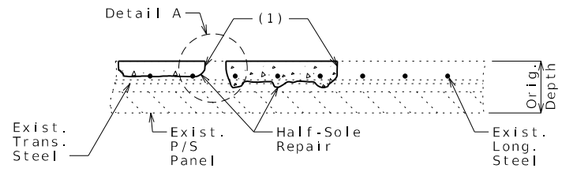



TYPICAL SECTION THRU DECK

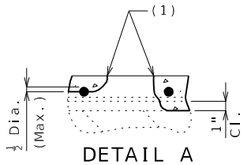



ELEVATION
(Bent No. 4)

Notes:
No heavy equipment will be allowed under the north side of bridge. If ground access is required to complete substructure repairs and application of protective coating is needed, only hand tools, ladders, scaffolding or low impact equipment will be allowed.




HALF-SOLE REPAIR




DETAIL A

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

(1) 1" vertical side shall be established outside the deteriorated area.

## Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Existing Expansion Joint & Adjacent Concrete | linear foot | 42 |
| Remove and Replace Barrier Curb | linear foot | 7 |
| Class B-2 Concrete | cu. yard | 3.1 |
| Substructure Repair (Formed) | sq. foot | 15 |
| Half-Sole Repair | sq. foot | 50 |
| Reinforcing Steel (Epoxy Coated) | pound | 290 |
| Protective Coating - Concrete Bents and Piers (Urethane) | lump sum | 1 |
| Segmental Expansion Joint System | linear foot | 39 |
| | | |
| | | |
| | | |

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications

Bridge Deck Rating = 6

**Design Loading:**

HS20-44 (Existing and New Construction)

**Design Unit Stresses:**

| | |
|---|---|
| Class B-2 Concrete (Superstructure, except Barrier) | f'c = 4,000 psi |
| Class B-1 Concrete (Barrier) | f'c = 4,000 psi |
| Reinforcing Steel (ASTM A615 Grade 60) | fy = 60,000 psi |

**Reinforcing Steel:**

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match existing bridge deck (roadway item).

Protective coating for concrete bents and piers (Urethane) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Bars bonded in existing concrete not removed shall be clearly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before finalizing the shop drawings.

**Traffic Handling:**

Structure to be closed during construction. See roadway plans for traffic control.

## REPAIRS TO BRIDGE: ROUTE 92 OVER PLATTE RIVER

ROUTE 92 FROM ROUTE 273 TO ROUTE I-29
ABOUT 0.8 MILE SOUTHEAST OF ROUTE 273
BEGINNING STATION 37+24.50± (Match Existing)

Designed 10/2025
Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



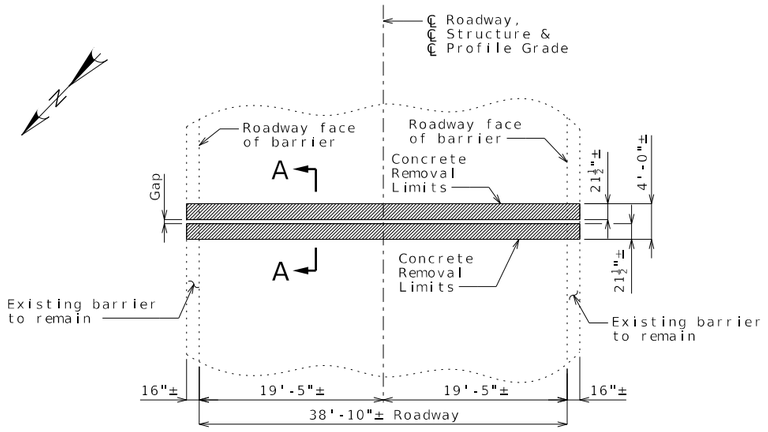
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 92 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY PLATTE
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A52601

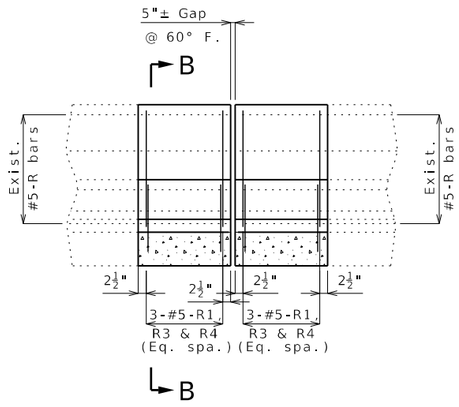
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

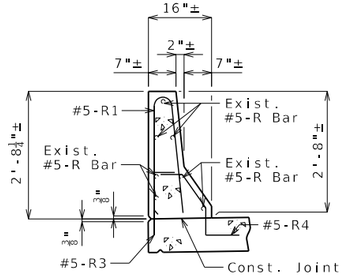
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




REMOVAL PLAN AT INTERMEDIATE BENT NO. 4



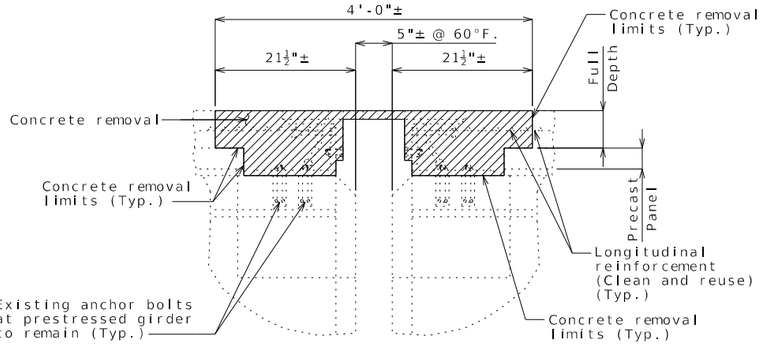

PART ELEVATION OF BARRIER



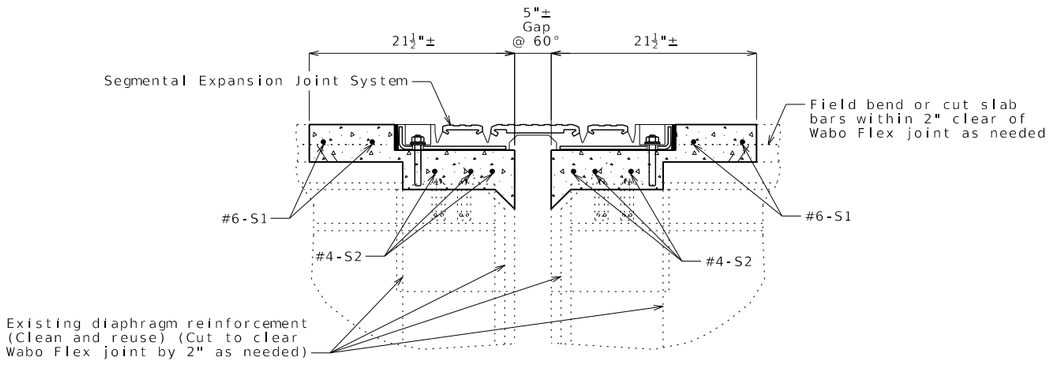

SECTION B-B

The cross-sectional area above the slab is 2.27 square feet.

Cut or bend existing longitudinal #5-R bars & #5-R4 to clear segmental joint blockout by 2" as needed.

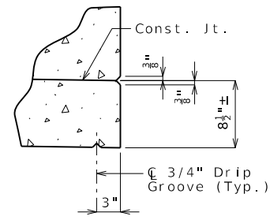



SECTION A-A




SLAB REPLACEMENT DETAIL

Note: Full depth slab replacement required over girders and overhangs.




DRIP GROOVE DETAIL

Notes:

Remove concrete in accordance with Sec 216.

Removal shall include removal of the existing expansion joint armor and anchorage as detailed and shall be completely covered by the unit price for Removal of Existing Expansion Joint and Adjacent Concrete.

Concrete removal to provide 1" minimum clearance beneath exposed reinforcing to remain. Removal depth may be increased as needed to accommodate new anchorage requirements for the replacement of joint as per manufacturer's recommendations.

Any existing concrete traffic delineators on the barrier removed during the joint replacement process shall be replaced with like and in kind and covered by the unit price for Remove and Replace Barrier Curb.

Barrier to be built parallel to grade with barrier joints on superstructure.

All exposed edges of barrier (Type B) shall match existing barrier edges.

Existing reinforcing may be replaced with like and in kind in accordance with Sec 216.

Any damage to the existing reinforcing epoxy coating shall be repaired according to Sec 710.

Concrete work shall be in accordance with Sec 704.

Cost for slab concrete, complete in place, for expansion joint replacement will be considered completely covered by the contract unit price for Class B-2 Concrete.

Cost for all concrete and reinforcement for curb, complete in place, will be considered completely covered by the contract unit price for Remove and Replace Barrier Curb.

Cost for furnishing and installing reinforcing steel for expansion joint replacement will be considered completely covered by the contract unit price for Reinforcing Steel (Epoxy Coated).

* Existing plans provided 5" gap between diaphragm faces at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed.

# SLAB DEMOLITION AND REPLACEMENT AT INTERMEDIATE BENT NO. 4

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

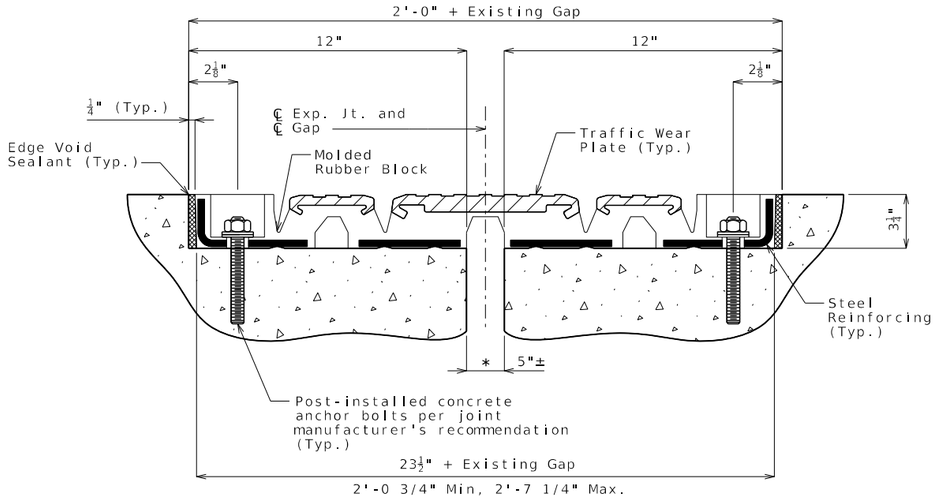
| ROUTE | STATE |
|---|---|
| 92 | MO |
| DISTRICT | SHEET NO. |
| BR | 2 |

COUNTY: PLATTE
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A52601

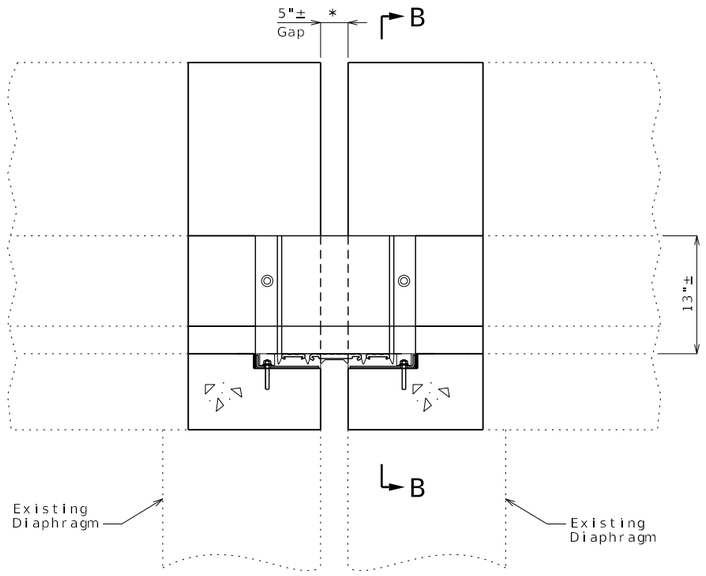
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

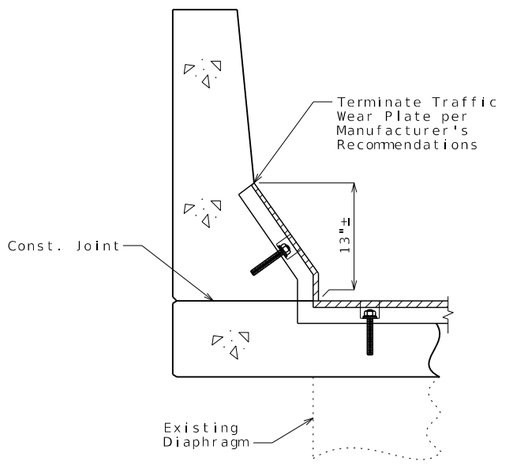
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SECTION THRU JOINT




PART ELEVATION OF BARRIER




SECTION B-B

Notes:

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

Replacement expansion joint shall be WaboFlex Model SR 6.5A as manufactured by Watson Bowman Acme Corp., Amherst, New York. The new joint is to be installed per manufacturer's recommendations.

The expansion device shall be fabricated to match the crown of the roadway.

All anchor bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A513).

* Existing plans provided 5" gap at the face of diaphragms at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed.

# SEGMENTAL EXPANSION JOINT SYSTEM AT INTERMEDIATE BENT NO. 4

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

| ROUTE | STATE |
|---|---|
| 92 | MO |
| DISTRICT | SHEET NO. |
| BR | 3 |

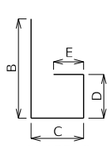
COUNTY: PLATTE
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A52601

| DESCRIPTION | DATE |
|---|---|
| | |

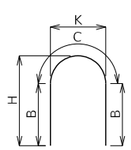
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

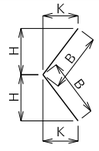
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING



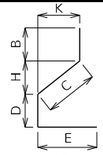
SHAPE 6
or 6S



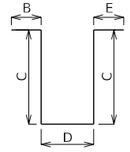
SHAPE 7



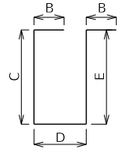
SHAPE 8
or 8S



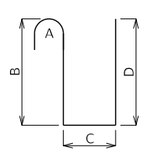
SHAPE 9
or 9S



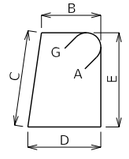
SHAPE 10
or 10S



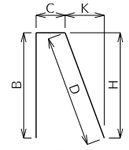
SHAPE 11
or 11S



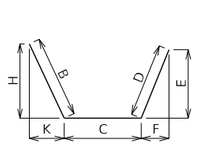
SHAPE 12



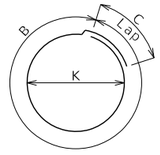
SHAPE 13S



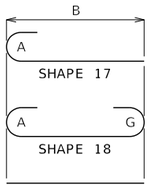
SHAPE 14
or 14S



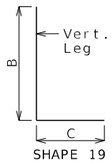
SHAPE 15
or 15S



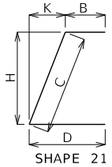
SHAPE 16



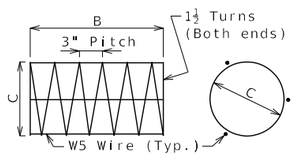
SHAPE 17
SHAPE 18
SHAPE 20



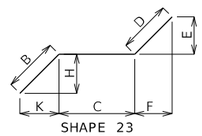
SHAPE 19
or 19S



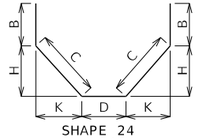
SHAPE 21
or 21S



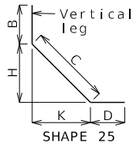
SHAPE 22



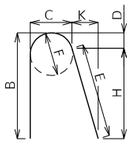
SHAPE 23
or 23S



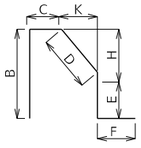
SHAPE 24
or 24S



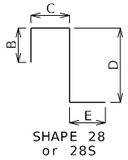
SHAPE 25
or 25S



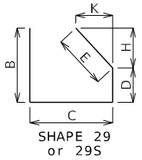
SHAPE 26



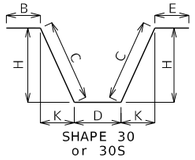
SHAPE 27S



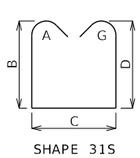
SHAPE 28
or 28S



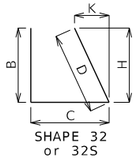
SHAPE 29
or 29S



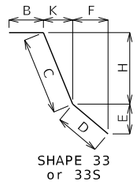
SHAPE 30
or 30S



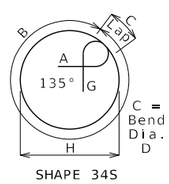
SHAPE 31S



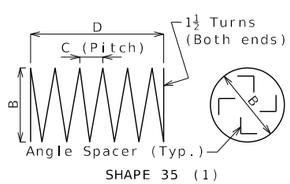
SHAPE 32
or 32S



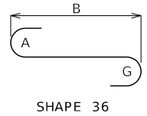
SHAPE 33
or 33S



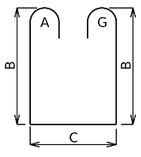
SHAPE 34S



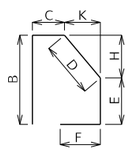
SHAPE 35 (1)



SHAPE 36



SHAPE 37S

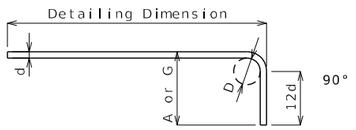


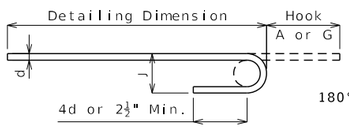
SHAPE 38S

## Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

| Size | Case | D | A or G | | J |
|---|---|---|---|---|---|
| | | | 90° | 180° | 180° |
| #4 | 1 | 3" | 8" | 6" | 4" |
| #5 | 1 | 3¾" | 10" | 7" | 5" |
| #6 | 1 | 4½" | 12" | 8¼" | 6" |
| #7 | 2 | 5¼" | 14" | 9¾" | 7" |
| | 3 | 7" | 15" | 11½" | 8¾" |
| #8 | 2 | 6" | 16" | 11" | 8" |
| | 3 | 8" | 17" | 13¼" | 10" |
| #9 | 1 | 9½" | 19½" | 15½" | 11¾" |
| #10 | 1 | 10¾" | 22" | 17½" | 13¼" |
| #11 | 1 | 12" | 24½" | 19½" | 14⅞" |
| #14 | 1 | 18¼" | 31¼" | 27½" | 21⅝" |
| #18 | 1 | 24" | 41½" | 36¼" | 28½" |



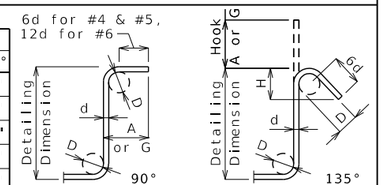



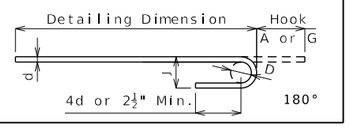

Stirrup Pin Bend Shapes (S)

| Size | Case | D | A or G | | H | J |
|---|---|---|---|---|---|---|
| | | | 90° | 135° | 180° | 135° | 180° |
| #4 | 2 | 2" | 4½" | 4½" | 5" | 2⅞" | 3" |
| | 3 | 3" | 5" | 5¼" | 6" | 3" | 4" |
| #5 | 2 | 2½" | 5¾" | 5¾" | 5¾" | 3⅝" | 3¾" |
| | 3 | 3¾" | 6¼" | 6½" | 7" | 3⅞" | 5" |
| #6 | 1 | 4½" | 12" | 7¾" | 8¼" | 4⅝" | 6" |

Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.




## BENDING DIAGRAMS

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

Reinforcing steel (ASTM A615 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

(1) Shall be a deformed or plain spiral bar or wire.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

| | Size | Substructure | | Superstructure | | | Entire Bridge | |
|---|---|---|---|---|---|---|---|---|
| | | Plain | Epoxy | Slab | Barrier | Slip Form | Plain | Epoxy |
| By Size | W5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 0 | 0 | 40 | 0 | 0 | 0 | 40 |
| | 5 | 0 | 0 | 0 | 122 | 0 | 0 | 122 |
| | 6 | 0 | 0 | 247 | 0 | 0 | 0 | 247 |
| | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| By Type | | 0 | 0 | 287 | 122 | 0 | 0 | 409 |

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.

Bill of Reinforcing Steel

| No. Req. | Size/ Mark | Location | Codes C | SH | V | Dimensions B ft in. | C ft in. | D ft in. | E ft in. | F ft in. | H ft in. | K ft in. | Nom. Length ft in. | Actual Length ft in. | Weight lb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Slab | | | | | | | | | | | | | |
| 4 | 6 S1 | SLAB | E | 20 | | 41 2.00 | | | | | | | 41 2 | 41 2 | 247 |
| 12 | 4 S2 | SLAB | E | 20 | | 5 0.00 | | | | | | | 5 0 | 5 0 | 40 |
| | | Barrier | | | | | | | | | | | | | |
| 12 | 5 R1 | BARRIER | E | 26S | | 2 6.00 | 4.00 | 2 5.13 | | | 2 6.00 | 3.00 | 4 11 | 4 11 | 62 |
| 12 | 5 R3 | BARRIER | E | 19S | | 17.00 | 6.00 | | | | | | 23 | 22 | 23 |
| 12 | 5 R4 | BARRIER | E | 27S | | | 6.00 | 11.25 | 7.00 | 12.00 | 9.25 | 6.38 | 3 0 | 2 11 | 37 |

## BILL OF REINFORCING STEEL

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

| ROUTE | STATE |
|---|---|
| 92 | MO |
| DISTRICT | SHEET NO. |
| BR | 4 |

COUNTY PLATTE

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A52601

DESCRIPTION

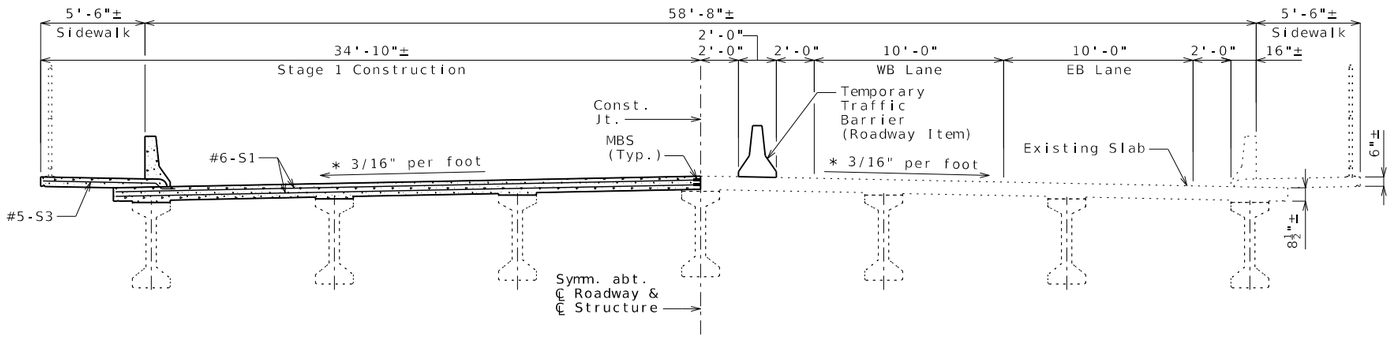
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

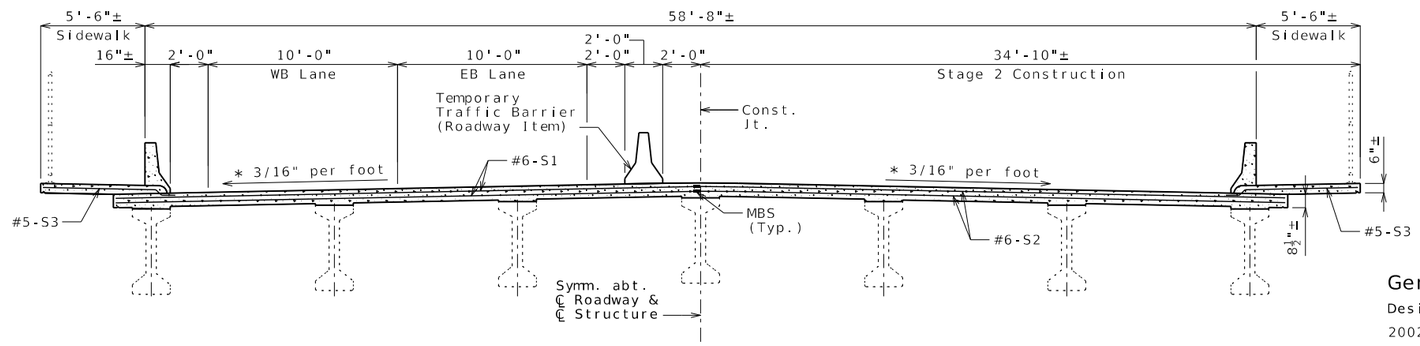
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

SEC/SUR 5 TWP 49N RGE 32W

# U.I.P. AND REHABILITATE EXISTING
# (4 @ 79') PRESTRESSED CONCRETE I-GIRDER SPANS, (34'-64'-45') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS




## STAGE 1 CONSTRUCTION
Looking East




## STAGE 2 CONSTRUCTION
Looking East

Notes:
Prestressed girders shown, wide flange beams similar.
* Final slope shall match existing.
Existing long. bars and barrier reinf. not shown for clarity.
Temporary Traffic Barrier shall not be attached to bridge deck.

### Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Existing Expansion Joint & Adjacent Concrete | linear foot | 70 |
| Remove and Replace Barrier Curb | linear foot | 7 |
| Class B-2 Concrete | cu. yard | 5.5 |
| Reinforcing Steel (Epoxy Coated) | pound | 840 |
| Segmental Expansion Joint System | linear foot | 56 |
| Segmental Expansion Joint System (Sidewalk) | linear foot | 11 |
| | | |
| | | |
| | | |

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications

Bridge Deck Rating = 7

**Design Loading:**

HS20-44 (Existing and New Construction)

**Design Unit Stresses:**

| | |
|---|---|
| Class B-2 Concrete (Superstructure, except Barrier) | f'c = 4,000 psi |
| Class B-1 Concrete (Barrier) | f'c = 4,000 psi |
| Reinforcing Steel (ASTM A615 Grade 60) | fy = 60,000 psi |

**Reinforcing Steel:**

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match existing bridge deck (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Bars bonded in existing concrete not removed shall be clearly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before finalizing the shop drawings.

**Traffic Handling:**

Traffic to be maintained during construction. See roadway plans for additional traffic control.

## REPAIRS TO BRIDGE: ROUTE 12 OVER CPKC RAILROAD

ROUTE 12 FROM ROUTE I-435 TO STERLING AVENUE
ABOUT 1.5 MILES EAST OF ROUTE I-435
BEGINNING STATION 76+86.54± (Match Existing)

Designed 10/2025
Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



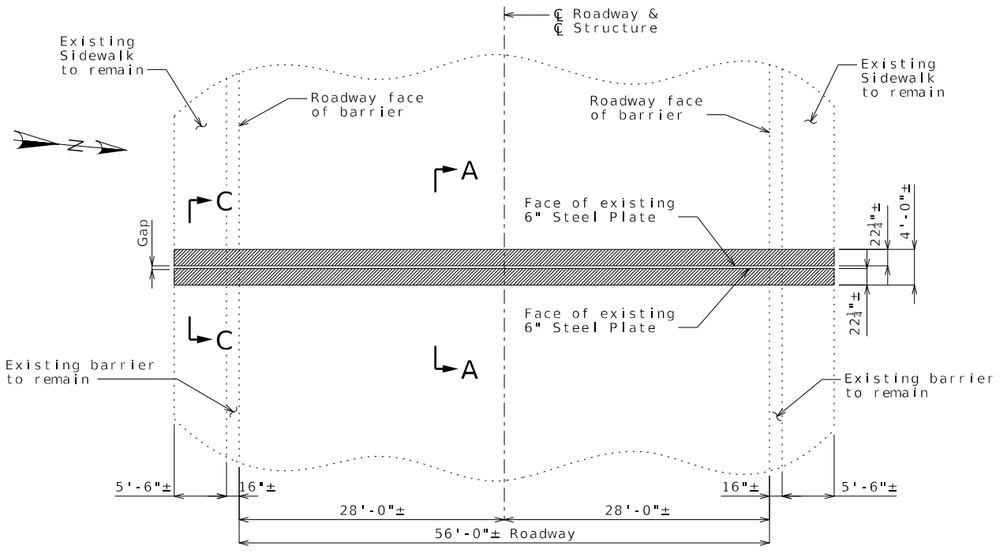
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2010027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 12 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A53131

DESCRIPTION | DATE

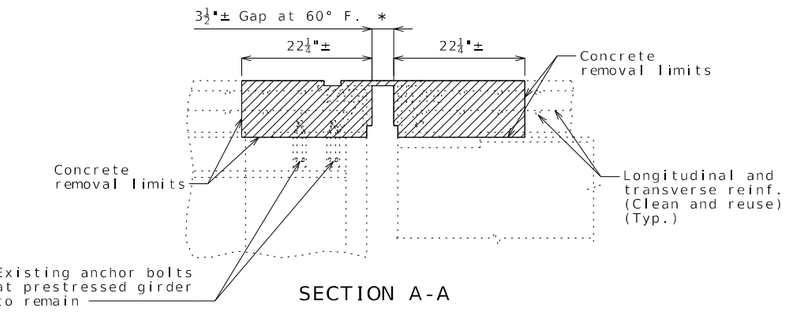
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

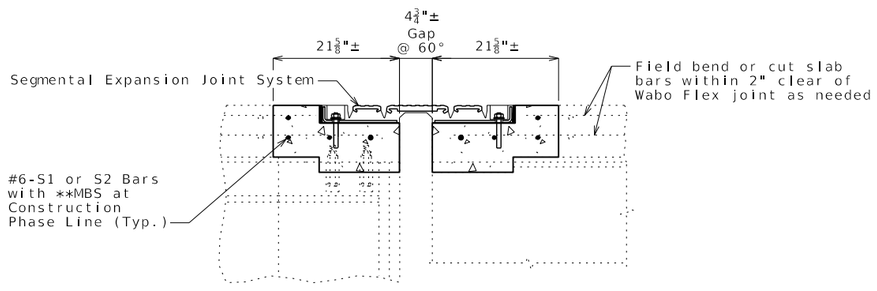



REMOVAL PLAN AT INTERMEDIATE BENT NO. 5

For Section C-C, see Sheet No. 4.

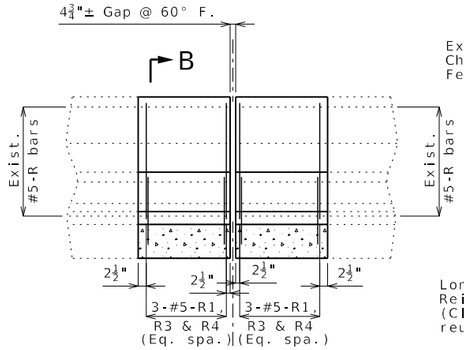



SECTION A-A

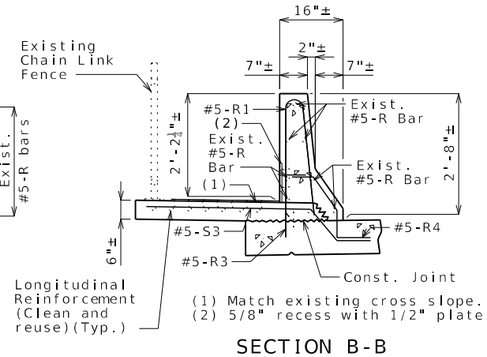



SLAB REPLACEMENT DETAIL

Note: Full depth slab replacement required over girders and overhangs.




PART ELEVATION OF BARRIER




(1) Match existing cross slope.
(2) 5/8" recess with 1/2" plate

SECTION B-B

The cross-sectional area above the slab is 2.27 square feet.

Cut or bend existing longitudinal #5-R bars & #5-R4 to clear segmental joint blockout by 2" as needed.

Notes:

Remove concrete in accordance with Sec 216.

Removal shall include removal of the existing expansion joint armor and anchorage as detailed and shall be completely covered by the unit price for Removal of Existing Expansion Joint & Adjacent Concrete.

Concrete removal to provide 1" minimum clearance beneath exposed reinforcing to remain. Removal depth may be increased as needed to accommodate new anchorage requirements for the replacement of joint as per manufacturer's recommendations.

Any existing concrete traffic delineators on the barrier removed during the joint replacement process shall be replaced with like and in kind and covered by the unit price for Remove and Replace Barrier Curb.

Barrier to be built parallel to grade with barrier joints on superstructure.

All exposed edges of barrier (Type B) shall match existing barrier edges.

Existing reinforcing may be replaced with like and in kind in accordance with Sec 216.

Any damage to the existing reinforcing epoxy coating shall be repaired according to Sec 710.

Concrete work shall be in accordance with Sec 704.

Cost for slab concrete, complete in place, for expansion joint replacement will be considered completely covered by the contract unit price for Class B-2 Concrete.

Cost for all concrete and reinforcement for curb, complete in place, will be considered completely covered by the contract unit price for Remove and Replace Barrier Curb.

Cost for furnishing and installing reinforcing steel for expansion joint replacement will be considered completely covered by the contract unit price for Reinforcing Steel (Epoxy Coated).

* Existing plans provided 3 1/2" gap from leg of 8"x6"x 5/8" angle to mounted 6"x 5/8" plate on superstructure at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed.

** MBS refers to mechanical bar splices. Mechanical bar splices shall be in accordance with Sec 706 or 710 except that no measurement will be made for mechanical bar splices and they will be considered completely covered by the contract unit price for other items.

# SLAB DEMOLITION AND REPLACEMENT AT INTERMEDIATE BENT NO. 5

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



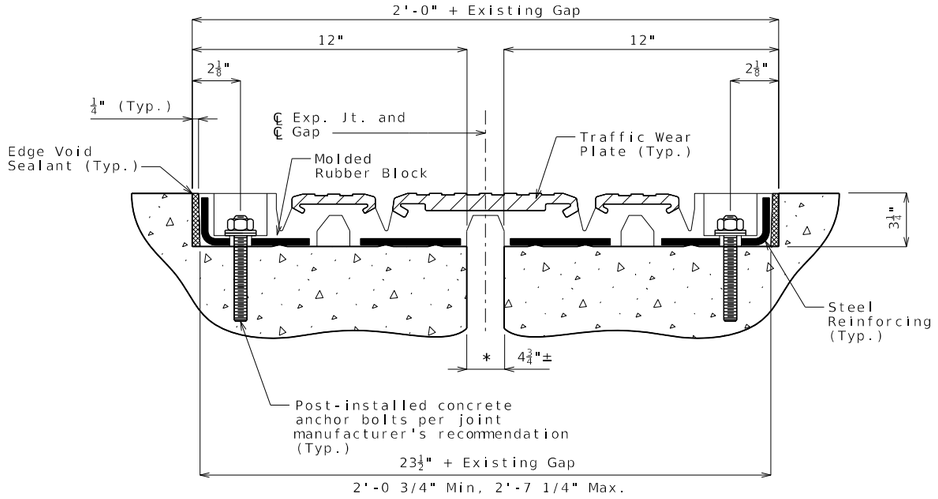
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 12 | STATE MO
DISTRICT BR | SHEET NO. 2
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A53131

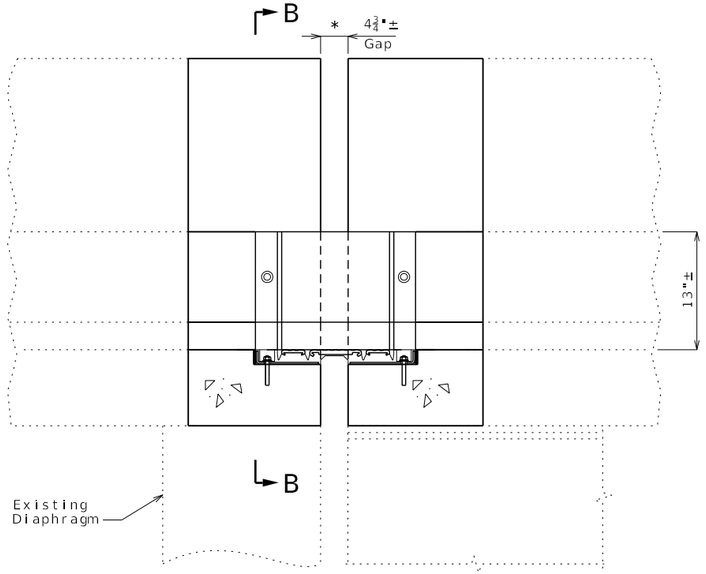
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

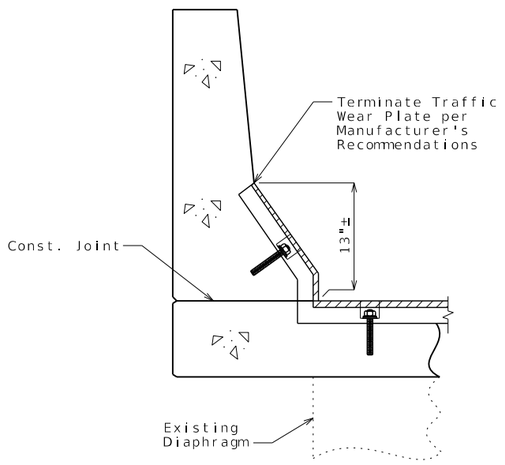
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SECTION THRU JOINT




PART ELEVATION OF BARRIER




SECTION B-B

Notes:

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

Replacement expansion joint shall be WaboFlex Model SR 6.5A as manufactured by Watson Bowman Acme Corp., Amherst, New York. The new joint is to be installed per manufacturer's recommendations.

The expansion device shall be fabricated to match the crown of the roadway.

All anchor bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A513).

* Existing plans provided 4 3/4"± gap between face of diaphragms and the end of wide flange at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed.

# SEGMENTAL EXPANSION JOINT SYSTEM AT INTERMEDIATE BENT NO. 5

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Curtis Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

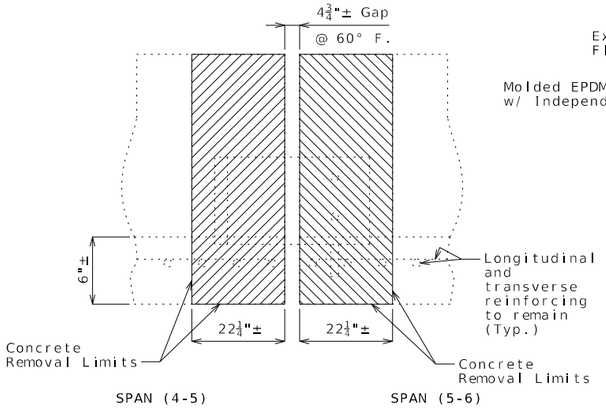
| ROUTE | STATE |
|---|---|
| 12 | MO |
| DISTRICT | SHEET NO. |
| BR | 3 |

COUNTY: JACKSON
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A53131

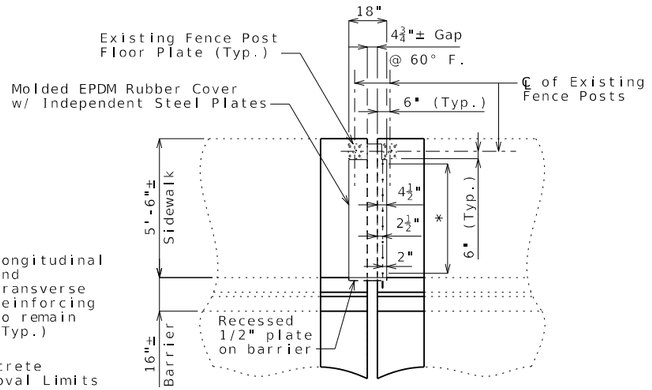
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

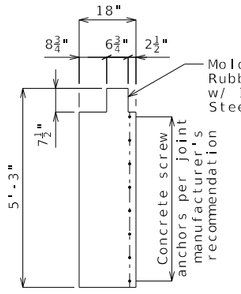
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING



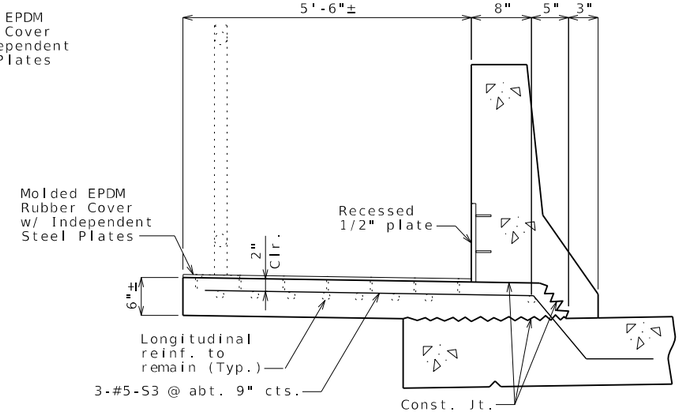

## SECTION C-C
(Left sidewalk shown, right side similar)



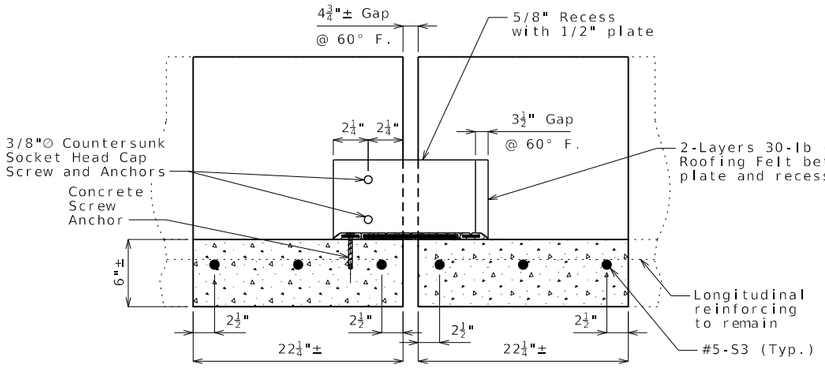

## PLAN OF SIDEWALK ON BRIDGE
* Concrete screw anchors per joint manufacturer's recommendation



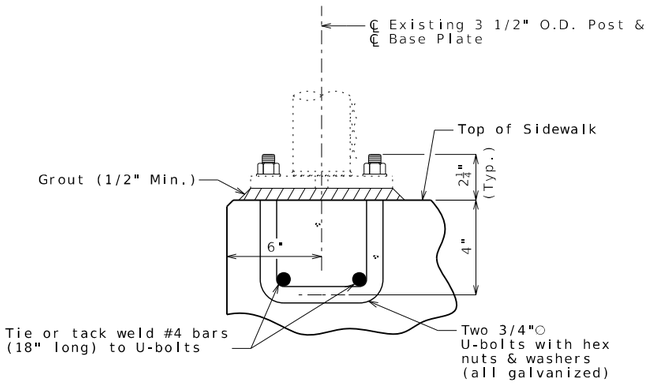

## PLAN OF SEGMENTAL EXPANSION JOINT SYSTEM (SIDEWALK)




## SECTION THRU SIDEWALK ON BRIDGE




## SIDEWALK REPLACEMENT DETAIL



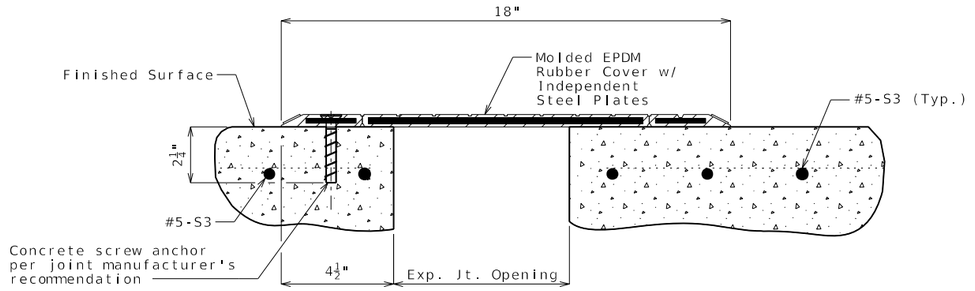

## POST CONNECTION

Notes:
Fence ends shall be temporarily supported during sidewalk replacement.

Contractor to remove around existing U-bolts, clean and reuse.

Alternatively U-bolts can be replaced at the contractors discretion. See Post Connection detail. No measurement will be made for post connections and they will be considered completely covered by the contract unit price for other items.

Barrier reinforcing not shown for clarity.




## SECTION THRU JOINT

Notes:
Replacement expansion joint shall be Wabo SafetyFlex Safety Cover SFP-1000 as manufactured by Watson Bowman Acme Corp., Amherst, New York. The new joint is to be installed per manufacturer's recommendations.

All exposed edges of sidewalk shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Concrete in the sidewalk shall be Class B-2.

Sidewalk shall be sloped 1/8" per foot.

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

Cost for sidewalk concrete, complete in place, for expansion joint replacement shall be considered completely covered by the contract unit price for Class B-2 concrete.

Cost for furnishing and installing reinforcing steel for expansion joint replacement will be considered completely covered by the contract unit price for Reinforcing Steel (Epoxy Coated).

# SEGMENTAL EXPANSION JOINT SYSTEM (SIDEWALK) DETAILS AT INTERMEDIATE BENT NO. 5

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



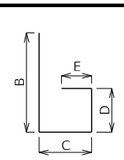
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 12 | STATE MO
DISTRICT BR | SHEET NO. 4
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A53131

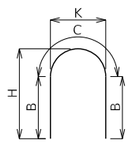
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

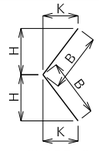
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING



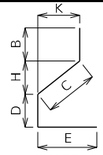
SHAPE 6
or 6S



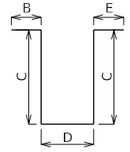
SHAPE 7



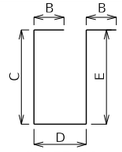
SHAPE 8
or 8S



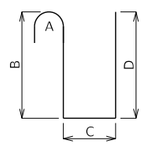
SHAPE 9
or 9S



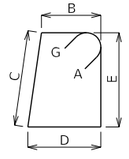
SHAPE 10
or 10S



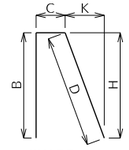
SHAPE 11
or 11S



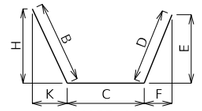
SHAPE 12



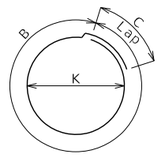
SHAPE 13S



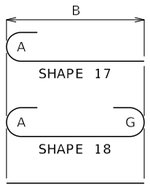
SHAPE 14
or 14S



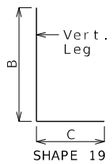
SHAPE 15
or 15S



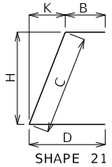
SHAPE 16



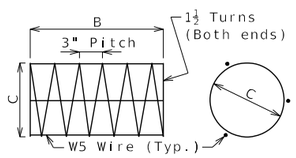
SHAPE 17
SHAPE 18
SHAPE 20



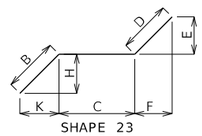
SHAPE 19
or 19S



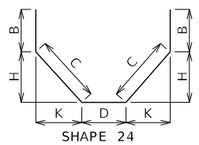
SHAPE 21
or 21S



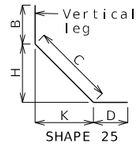
SHAPE 22



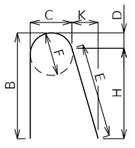
SHAPE 23
or 23S



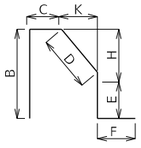
SHAPE 24
or 24S



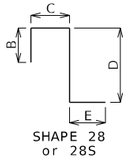
SHAPE 25
or 25S



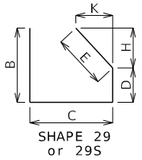
SHAPE 26



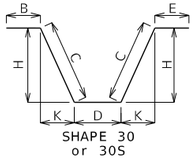
SHAPE 27S



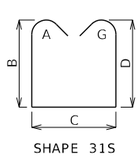
SHAPE 28
or 28S



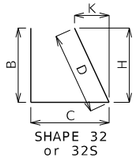
SHAPE 29
or 29S



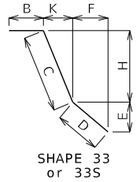
SHAPE 30
or 30S



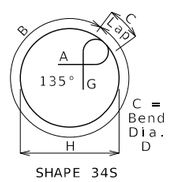
SHAPE 31S



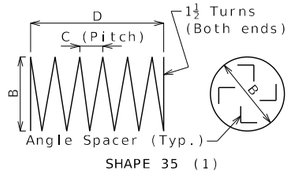
SHAPE 32
or 32S



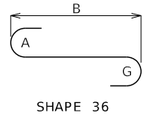
SHAPE 33
or 33S



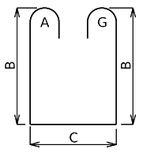
SHAPE 34S



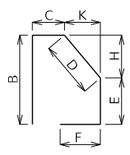
SHAPE 35 (1)



SHAPE 36



SHAPE 37S



SHAPE 38S

## BENDING DIAGRAMS

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

Reinforcing steel (ASTM A615 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

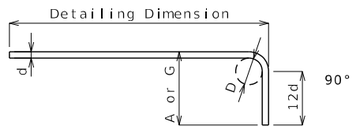
(1) Shall be a deformed or plain spiral bar or wire.

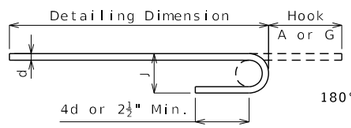
Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

### Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

| Size | Case | D | A or G 90° | A or G 180° | J 180° |
|---|---|---|---|---|---|
| #4 | 1 | 3" | 8" | 6" | 4" |
| #5 | 1 | 3¾" | 10" | 7" | 5" |
| #6 | 1 | 4½" | 12" | 8¼" | 6" |
| #7 | 2 | 5¼" | 14" | 9¾" | 7" |
| | 3 | 7" | 15" | 11½" | 8¾" |
| #8 | 2 | 6" | 16" | 11" | 8" |
| | 3 | 8" | 17" | 13¼" | 10" |
| #9 | 1 | 9½" | 19½" | 15½" | 11¾" |
| #10 | 1 | 10¾" | 22" | 17½" | 13¼" |
| #11 | 1 | 12" | 24½" | 19½" | 14⅞" |
| #14 | 1 | 18¼" | 31¼" | 27½" | 21⅝" |
| #18 | 1 | 24" | 41½" | 36¼" | 28½" |



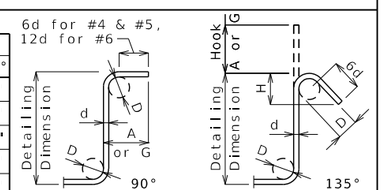



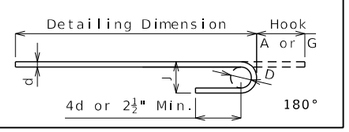

Stirrup Pin Bend Shapes (S)

| Size | Case | D | A or G 90° | A or G 135° | A or G 180° | H 135° | J 180° |
|---|---|---|---|---|---|---|---|
| #4 | 2 | 2" | 4½" | 4½" | 5" | 2⅞" | 3" |
| | 3 | 3" | 5" | 5¼" | 6" | 3" | 4" |
| #5 | 2 | 2½" | 5¾" | 5¾" | 5¾" | 3⅝" | 3¾" |
| | 3 | 3¾" | 6¼" | 6½" | 7" | 3⅞" | 5" |
| #6 | 1 | 4½" | 12" | 7¾" | 8¼" | 4⅝" | 6" |

Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.




### Reinforcing Steel Totals (Pounds)

| | Size | Substructure Plain | Substructure Epoxy | Superstructure Slab | Superstructure Barrier | Superstructure Slip Form | Entire Bridge Plain | Entire Bridge Epoxy |
|---|---|---|---|---|---|---|---|---|
| By Size | W5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 0 | 0 | 102 | 122 | 0 | 0 | 224 |
| | 6 | 0 | 0 | 740 | 0 | 0 | 0 | 740 |
| | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| By Type | | 0 | 0 | 842 | 122 | 0 | 0 | 964 |

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.

### Bill of Reinforcing Steel

| No. Req. | Size/ Mark | Location | Codes C | Codes SH | Codes V | Dimensions B ft in. | C ft in. | D ft in. | E ft in. | F ft in. | H ft in. | K ft in. | Nom. Length ft in. | Actual Length ft in. | Weight lb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Slab | | | | | | | | | | | | | |
| 8 | 6 S1 | SLAB | E | 20 | | 30 10.00 | | | | | | | 30 10 | 30 10 | 370 |
| 8 | 6 S2 | SLAB | E | 20 | | 30 10.00 | | | | | | | 30 10 | 30 10 | 370 |
| | | Sidewalk | | | | | | | | | | | | | |
| 12 | 5 S3 | SIDEWALK | E | 9 | | 6 0.00 | 11.90 | 15.00 | | | 7.25 | 8.75 | 8 3 | 8 2 | 102 |
| | | Barrier | | | | | | | | | | | | | |
| 12 | 5 R1 | BARRIER | E | 26S | | 2 6.00 | 4.00 | 5.13 | | | 2 6.00 | 3.00 | 4 11 | 4 11 | 62 |
| 12 | 5 R3 | BARRIER | E | 19S | | 17.00 | 6.00 | | | | | | 23 | 22 | 23 |
| 12 | 5 R4 | BARRIER | E | 27S | | | 6.00 | 11.25 | 7.00 | 12.00 | 9.25 | 6.38 | 3 0 | 2 11 | 37 |

## BILL OF REINFORCING STEEL

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

| ROUTE | STATE |
|---|---|
| 12 | MO |
| DISTRICT | SHEET NO. |
| BR | 5 |

COUNTY JACKSON

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A53131

DESCRIPTION | DATE

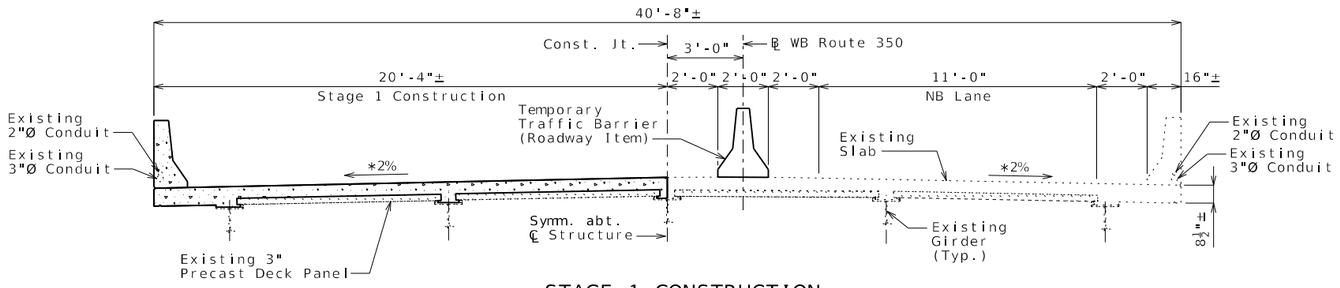
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

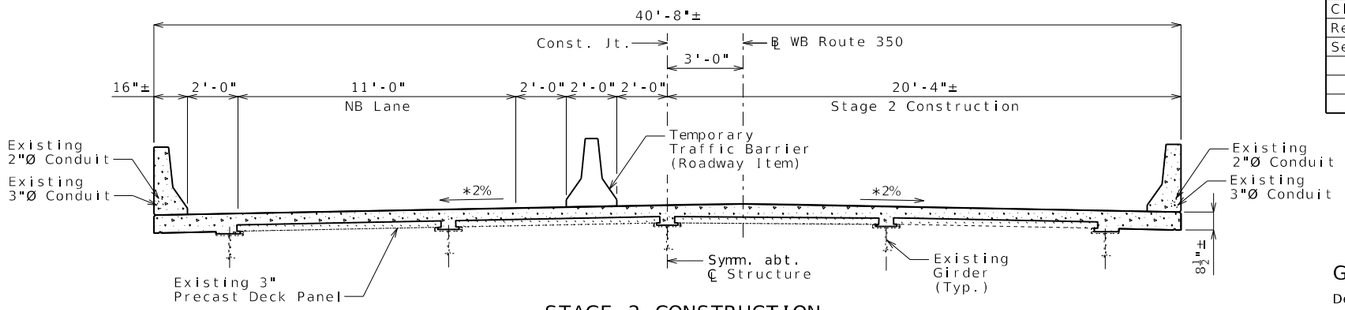
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

SEC/SUR 36 TWP 49N RGE 33W

# U.I.P. AND REHABILITATE EXISTING
# (120'-170'-170'-120') CONTINUOUS COMPOSITE PLATE GIRDER SPANS (SKEW: 56° RA)




STAGE 1 CONSTRUCTION
Looking East

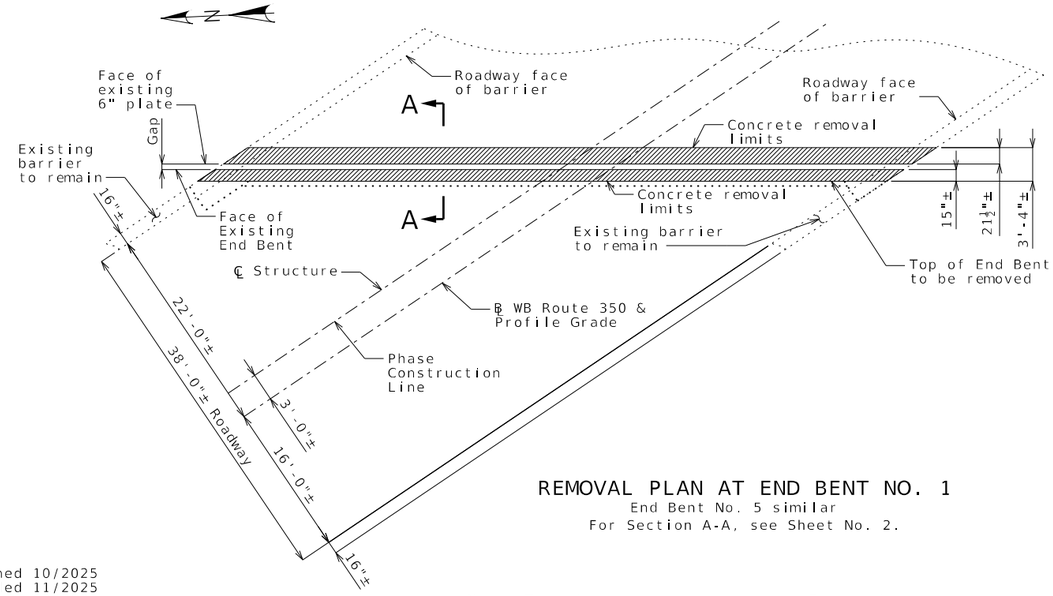



STAGE 2 CONSTRUCTION
Looking East

Notes:
∗ Final slope shall match existing.
Existing long. bars and barrier reinf. not shown for clarity.
Temporary traffic barrier shall not be attached to bridge deck.

## Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Existing Expansion Joint & Adjacent Concrete | linear foot | 145 |
| Remove and Replace Barrier Curb | linear foot | 12 |
| Class B-2 Concrete | cu. yard | 8.9 |
| Reinforcing Steel (Epoxy Coated) | pound | 440 |
| Segmental Expansion Joint System | linear foot | 136 |
| | | |
| | | |
| | | |




REMOVAL PLAN AT END BENT NO. 1
End Bent No. 5 similar
For Section A-A, see Sheet No. 2.

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications

Bridge Deck Rating = 6

**Design Loading:**

HS20-44 (Existing and New Construction)

**Design Unit Stresses:**

| | |
|---|---|
| Class B-2 Concrete (Superstructure, except Barrier) | f'c = 4,000 psi |
| Class B-1 Concrete (Barrier) | f'c = 4,000 psi |
| Reinforcing Steel (ASTM A615 Grade 60) | fy = 60,000 psi |

**Reinforcing Steel:**

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match existing bridge deck (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Bars bonded in existing concrete not removed shall be clearly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before finalizing the shop drawings.

**Traffic Handling:**

Traffic to be maintained during construction. See roadway plans for additional traffic control.

## REPAIRS TO BRIDGE: ROUTE 350 WB OVER ROUTE I-435

ROUTE 350 WB FROM ROUTE 40 TO ROUTE 350
ABOUT 2.0 MILES NORTHWEST OF RAYTOWN, MISSOURI
BEGINNING STATION 66+61.18± (Match Existing)

Designed 10/2025
Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



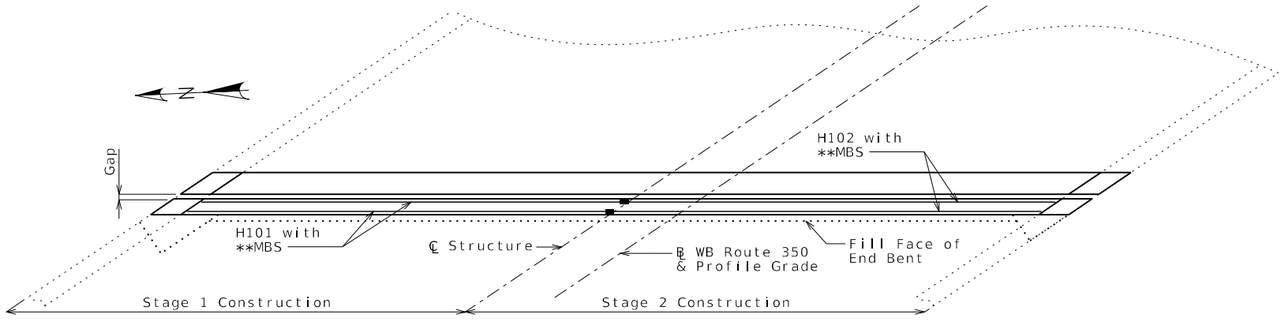
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 350 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A63331

DESCRIPTION | DATE

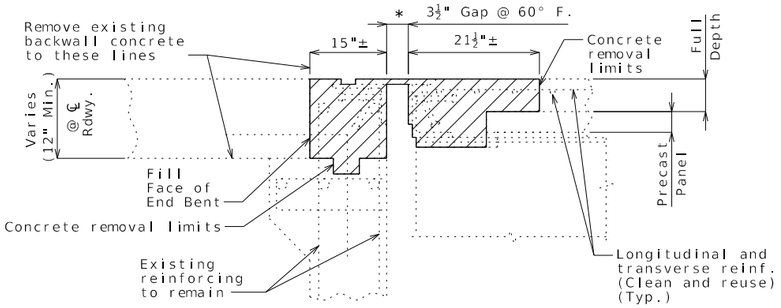
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

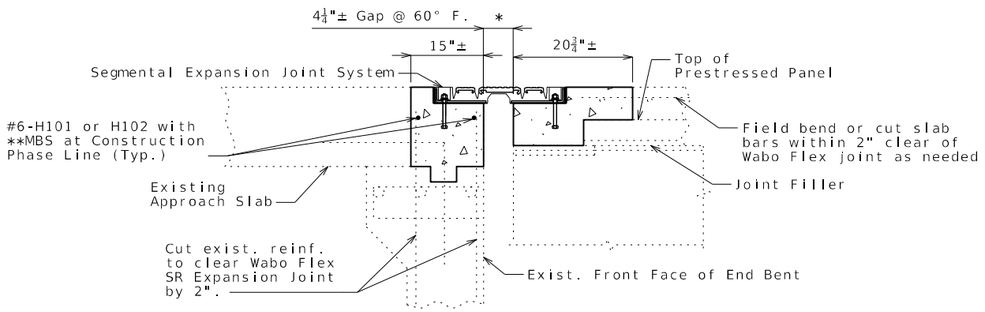



## SLAB REPLACEMENT DETAIL AT END BENT NO. 1

End Bent No. 5 similar

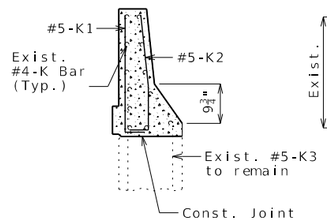



SECTION A-A

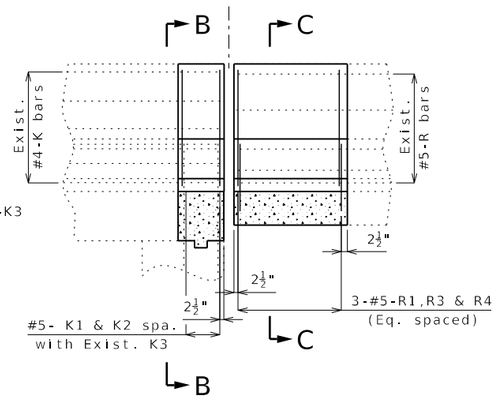



## SLAB REPLACEMENT DETAIL

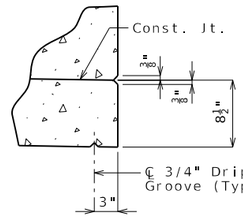
Note: Full depth slab replacement required over girders and overhangs.



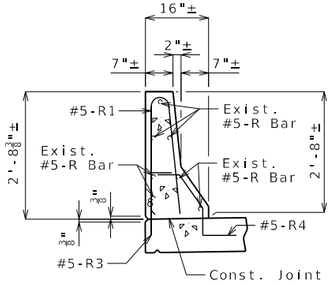

SECTION B-B




PART ELEVATION OF BARRIER




DRIP GROOVE DETAIL




SECTION C-C

The cross-sectional area above the slab is 2.27 square feet.

Cut or bend existing longitudinal #5-R bars & #5-R4 to clear segmental joint blockout by 2" as needed.

Notes:

Remove concrete in accordance with Sec 216.

Removal shall include removal of the existing expansion joint armor and anchorage as detailed and shall be completely covered by the unit price for Removal of Existing Expansion Joint & Adjacent Concrete.

Concrete removal to provide 1" minimum clearance beneath exposed reinforcing to remain. Removal depth may be increased as needed to accommodate new anchorage requirements for the replacement of joint as per manufacturer's recommendations.

Care should be taken to not damage conduit in barrier curb during removal. Any damage to existing conduit as a result of the contractor's operations shall be repaired or replaced as required by the engineer at the contractor's expense.

Any existing concrete traffic delineators on the barrier removed during the joint replacement process shall be replaced with like and in kind and covered by the unit price for Remove and Replace Barrier Curb.

Barrier to be built parallel to grade with barrier joints on superstructure.

All exposed edges of barrier (Type B) shall match existing barrier edges.

Existing reinforcing may be replaced with like and in kind in accordance with Sec 216.

Any damage to the existing reinforcing epoxy coating shall be repaired according to Sec 710.

Concrete work shall be in accordance with Sec 704.

Cost for slab concrete, complete in place, for expansion joint replacement will be considered completely covered by the contract unit price for Class B-2 Concrete.

Cost for all concrete and reinforcement for curb, complete in place will be considered completely covered by the contract unit price for Remove and Replace Barrier Curb.

Cost for furnishing and installing reinforcing steel for expansion joint replacement will be considered completely covered by the contract unit price for Reinforcing Steel (Epoxy Coated).

* Existing plans provided 3 1/2" gap from inside face of backwall to mounted 6"x 5/8" plate on superstructure at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed to match backwall and diaphragm faces.

** MBS refers to mechanical bar splices. Mechanical bar splices shall be in accordance with Sec 706 or 710 except that no measurement will be made for mechanical bar splices and they will be considered completely covered by the contract unit price for other items.

# SLAB DEMOLITION AND REPLACEMENT AT END BENTS

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Caris Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

| ROUTE | STATE |
|---|---|
| 350 | MO |
| DISTRICT | SHEET NO. |
| BR | 2 |

COUNTY JACKSON

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

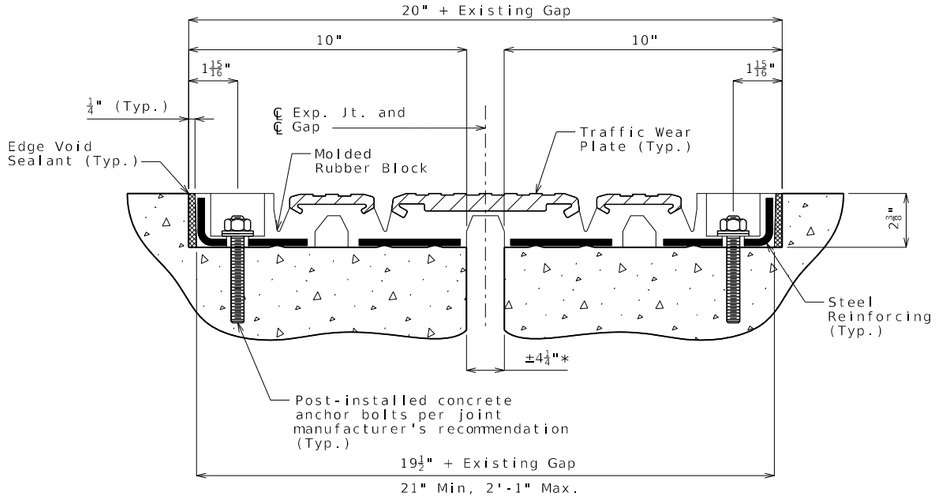
BRIDGE NO. A63331

DESCRIPTION | DATE

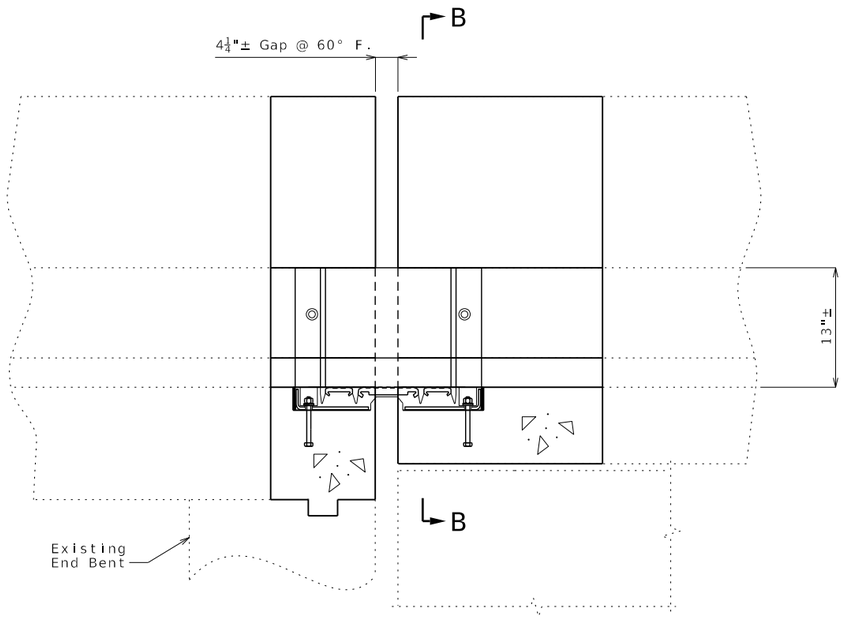
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

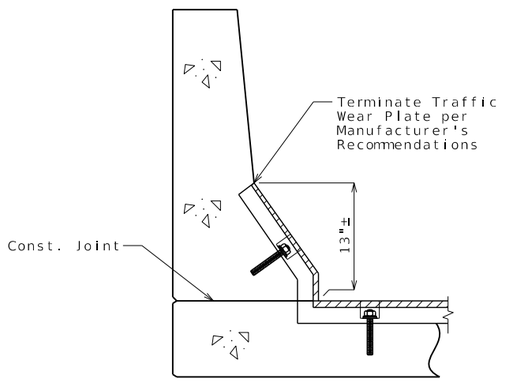
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SECTION THRU JOINT




PART ELEVATION OF BARRIER




SECTION B-B

Notes:

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

Replacement expansion joint shall be WaboFlex Model SR 4.0 as manufactured by Watson Bowman Acme Corp., Amherst, New York. The new joint is to be installed per manufacturer's recommendations.

The expansion device shall be fabricated to match the crown of the roadway.

All anchor bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A513).

* Existing plans provided 3 1/2" gap from leg of 8"x6"x 5/8" angle to mounted 6"x 5/8" plate on superstructure at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed to match backwall and diaphragm faces.

# SEGMENTAL EXPANSION JOINT SYSTEM AT END BENTS NO. 1 & 5

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



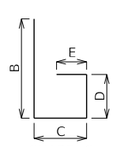
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 350 | STATE MO
DISTRICT BR | SHEET NO. 3
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A63331

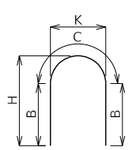
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

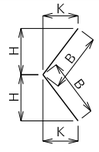
TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING



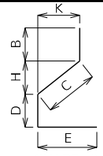
SHAPE 6
or 6S



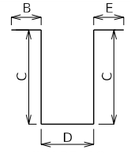
SHAPE 7



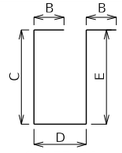
SHAPE 8
or 8S



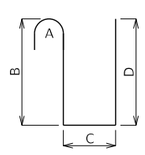
SHAPE 9
or 9S



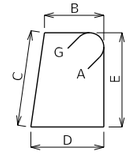
SHAPE 10
or 10S



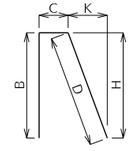
SHAPE 11
or 11S



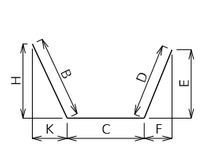
SHAPE 12



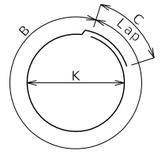
SHAPE 13S



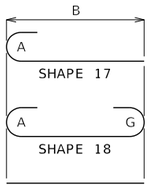
SHAPE 14
or 14S



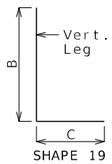
SHAPE 15
or 15S



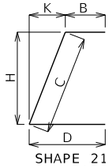
SHAPE 16



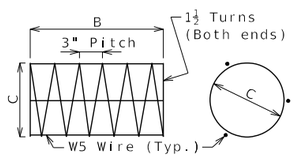
SHAPE 17
SHAPE 18
SHAPE 20



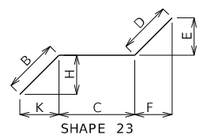
SHAPE 19
or 19S



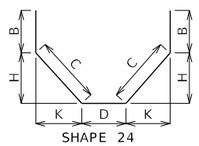
SHAPE 21
or 21S



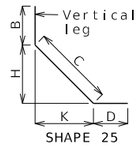
SHAPE 22



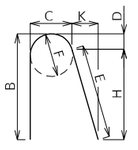
SHAPE 23
or 23S



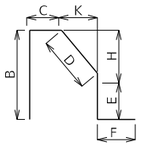
SHAPE 24
or 24S



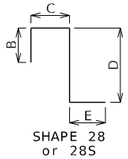
SHAPE 25
or 25S



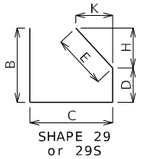
SHAPE 26



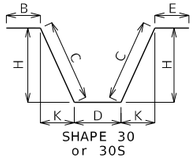
SHAPE 27S



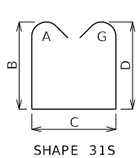
SHAPE 28
or 28S



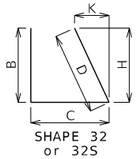
SHAPE 29
or 29S



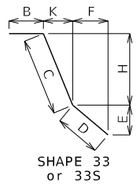
SHAPE 30
or 30S



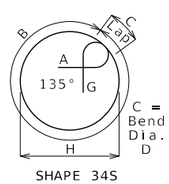
SHAPE 31S



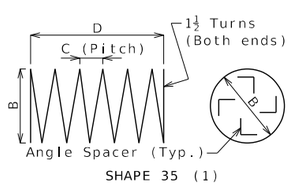
SHAPE 32
or 32S



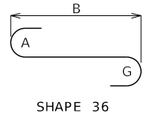
SHAPE 33
or 33S



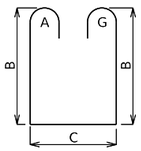
SHAPE 34S



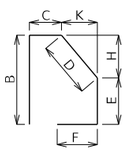
SHAPE 35 (1)



SHAPE 36



SHAPE 37S



SHAPE 38S

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

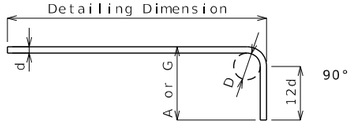
(1) Shall be a deformed or plain spiral bar or wire.

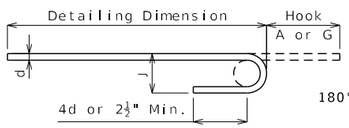
Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

## Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

| Size | Case | D | A or G | | J |
|---|---|---|---|---|---|
| | | | 90° | 180° | 180° |
| #4 | 1 | 3" | 8" | 6" | 4" |
| #5 | 1 | 3¾" | 10" | 7" | 5" |
| #6 | 1 | 4½" | 12" | 8¼" | 6" |
| #7 | 2 | 5¼" | 14" | 9¾" | 7" |
| | 3 | 7" | 15" | 11½" | 8¾" |
| #8 | 2 | 6" | 16" | 11" | 8" |
| | 3 | 8" | 17" | 13¼" | 10" |
| #9 | 1 | 9½" | 19½" | 15½" | 11¾" |
| #10 | 1 | 10¾" | 22" | 17½" | 13¼" |
| #11 | 1 | 12" | 24½" | 19½" | 14⅞" |
| #14 | 1 | 18¼" | 31¼" | 27½" | 21⅝" |
| #18 | 1 | 24" | 41½" | 36¼" | 28½" |



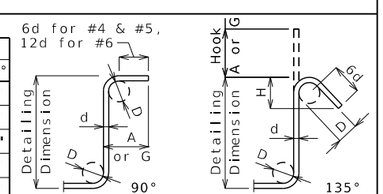



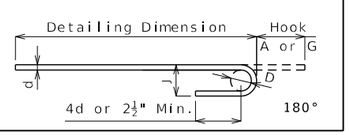

Stirrup Pin Bend Shapes (S)

| Size | Case | D | A or G | | H | J |
|---|---|---|---|---|---|---|
| | | | 90° | 135° | 180° | 135° | 180° |
| #4 | 2 | 2" | 4½" | 4½" | 5" | 2⅞" | 3" |
| | 3 | 3" | 5" | 5¼" | 6" | 3" | 4" |
| #5 | 2 | 2½" | 5¾" | 5¾" | 5¾" | 3⅝" | 3¾" |
| | 3 | 3¾" | 6¼" | 6½" | 7" | 3⅞" | 5" |
| #6 | 1 | 4½" | 12" | 7¾" | 8¼" | 4⅝" | 6" |

Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.




## BENDING DIAGRAMS

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

Reinforcing steel (ASTM A615 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

## Reinforcing Steel Totals (Pounds)

| | Size | Substructure | | Superstructure | | | Entire Bridge | |
|---|---|---|---|---|---|---|---|---|
| | | Plain | Epoxy | Slab | Barrier | Slip Form | Plain | Epoxy |
| By Size | W5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 0 | 0 | 0 | 178 | 0 | 0 | 178 |
| | 6 | 0 | 0 | 434 | 0 | 0 | 0 | 434 |
| | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| By Type | | 0 | 0 | 434 | 178 | 0 | 0 | 612 |

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.

## Bill of Reinforcing Steel

| No. Req. | Size/ Mark | Location | Codes C | SH | V | Dimensions B ft in. | C ft in. | D ft in. | E ft in. | F ft in. | H ft in. | K ft in. | Nom. Length ft in. | Actual Length ft in. | Weight lb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Abutment | | | | | | | | | | | | | |
| 4 | 6 H101 | BACKWALL | E | 20 | | 36 2.00 | | | | | | | 36 2 | 36 2 | 217 |
| 4 | 6 H102 | BACKWALL | E | 20 | | 36 2.00 | | | | | | | 36 2 | 36 2 | 217 |
| | | Barrier | | | | | | | | | | | | | |
| 12 | 5 R1 | BARRIER | E | 26S | | 2 6.00 | 4.00 | 2 5.13 | | | 2 6.00 | 3.00 | 4 11 | 4 11 | 62 |
| 12 | 5 R3 | BARRIER | E | 19S | | 17.00 | 6.00 | | | | | | 23 | 22 | 23 |
| 12 | 5 R4 | BARRIER | E | 27S | | | 6.00 | 11.25 | 7.00 | 12.00 | 9.25 | 6.38 | 3 0 | 2 11 | 37 |
| 8 | 5 K1 | BARRIER | E | 19S | | 3 1.00 | 5.13 | | | | | | 3 6 | 3 4 | 28 |
| 8 | 5 K2 | BARRIER | E | 14S | | 5.13 | 19.13 | 18.00 | | | 2.00 | 17.88 | 3 6 | 3 4 | 28 |

# BILL OF REINFORCING STEEL

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Caris Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

| ROUTE | STATE |
|---|---|
| 350 | MO |
| DISTRICT | SHEET NO. |
| BR | 4 |

COUNTY JACKSON

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A63331

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

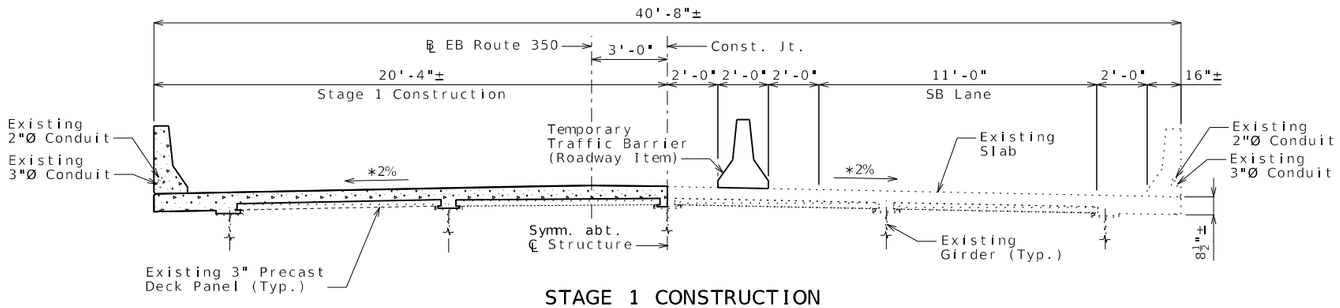
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

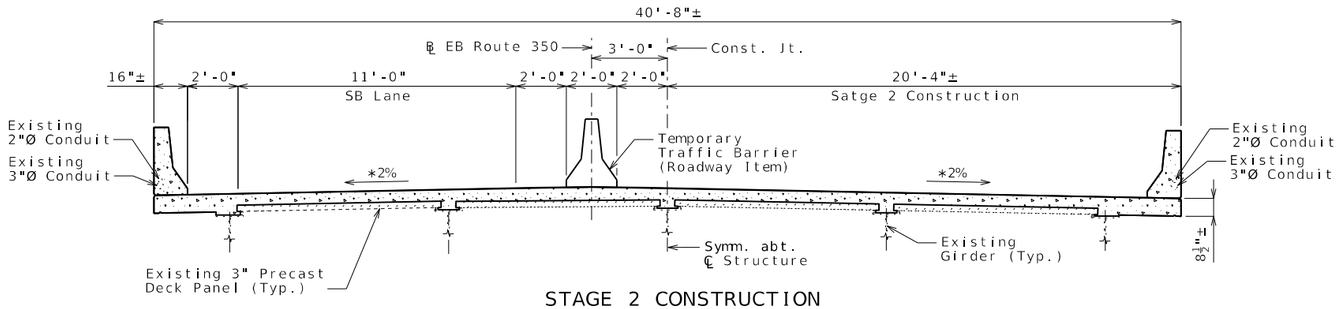
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

SEC/SUR 36 TWP 49N RGE 33W

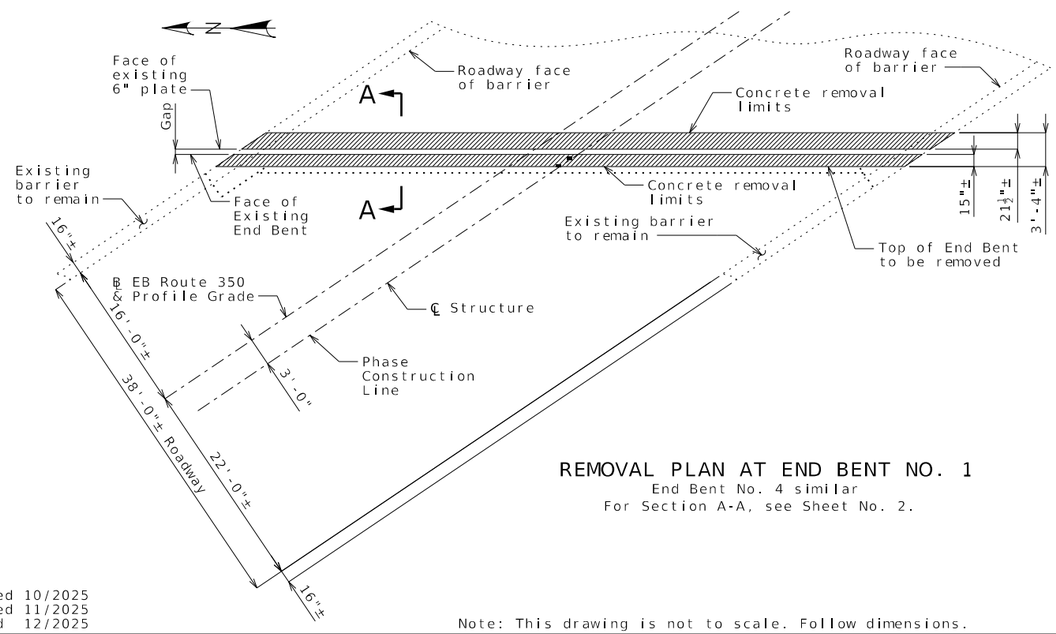
# U.I.P. AND REHABILITATE EXISTING
# (190'-250'-190') CONTINUOUS COMPOSITE PLATE GIRDER SPANS (SKEW: 56° RA)




STAGE 1 CONSTRUCTION
Looking East




STAGE 2 CONSTRUCTION
Looking East




REMOVAL PLAN AT END BENT NO. 1
End Bent No. 4 similar
For Section A-A, see Sheet No. 2.

Notes:
∗ Final slope shall match existing.
Existing long. bars and barrier reinf. not shown for clarity.
Temporary traffic barrier shall not be attached to bridge deck.

## Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Existing Expansion Joint & Adjacent Concrete | linear foot | 145 |
| Remove and Replace Barrier Curb | linear foot | 12 |
| Class B-2 Concrete | cu. yard | 8.9 |
| Reinforcing Steel (Epoxy Coated) | pound | 440 |
| Segmental Expansion Joint System | linear foot | 136 |
| | | |
| | | |
| | | |

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications

Bridge Deck Rating = 6

**Design Loading:**

HS20-44 (Existing and New Construction)

**Design Unit Stresses:**

| | |
|---|---|
| Class B-2 Concrete (Superstructure, except Barrier) | f'c = 4,000 psi |
| Class B-1 Concrete (Barrier) | f'c = 4,000 psi |
| Reinforcing Steel (ASTM A615 Grade 60) | fy = 60,000 psi |

**Reinforcing Steel:**

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match existing bridge deck (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Bars bonded in esisting concrete not removed shall be clearly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before finalizing the shop drawings.

**Traffic Handling:**

Traffic to be maintained during construction. See roadway plans for additional traffic control.

## REPAIRS TO BRIDGE: ROUTE 350 EB OVER ROUTE I-435 SB

ROUTE 350 EB FROM ROUTE 40 TO ROUTE 350
ABOUT 2.0 MILES NORTHWEST OF RAYTOWN, MISSOURI
BEGINNING STATION 68+80.19± (Match Existing)

Designed 10/2025
Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



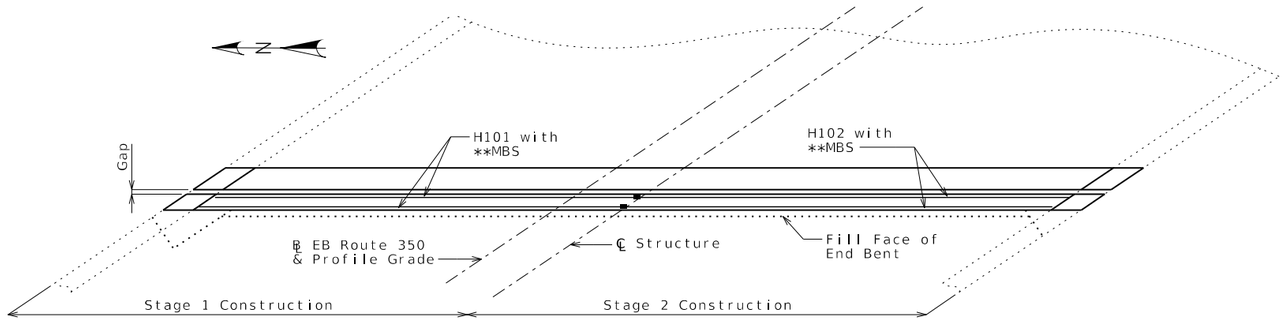
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 350 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A63341

DESCRIPTION | DATE

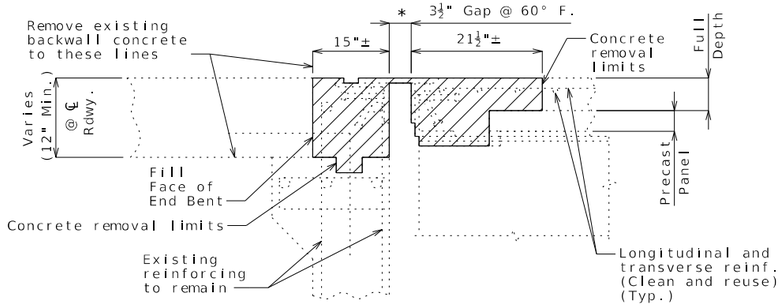
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

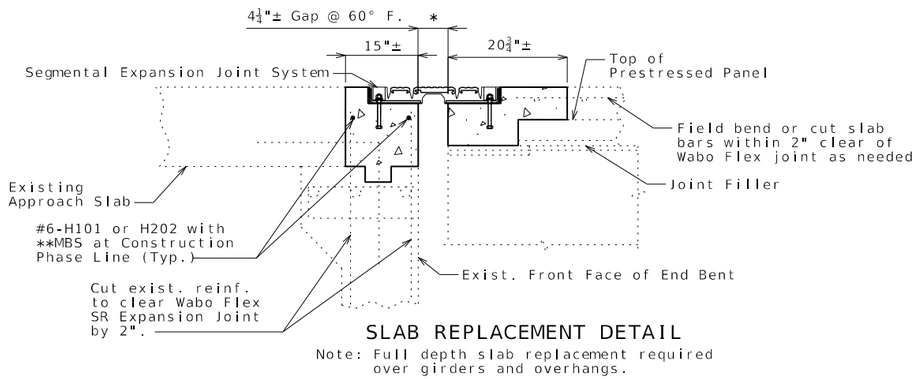



## SLAB REPLACEMENT DETAIL AT END BENT NO. 1

End Bent No. 4 similar

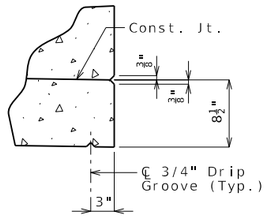



SECTION A-A

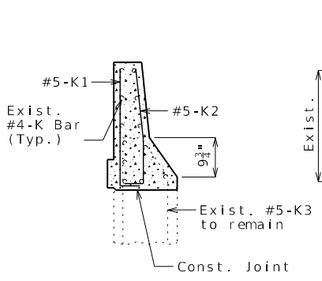



## SLAB REPLACEMENT DETAIL

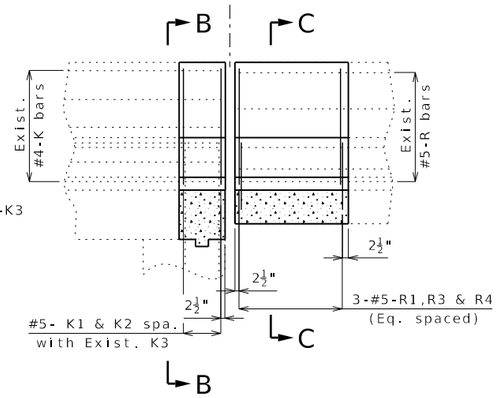
Note: Full depth slab replacement required over girders and overhangs.



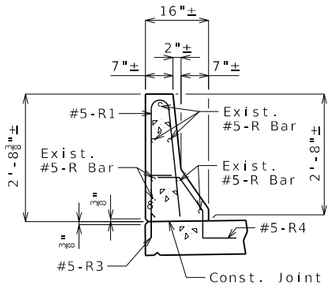

## DRIP GROOVE DETAIL




## SECTION B-B




## PART ELEVATION OF BARRIER




## SECTION C-C

The cross-sectional area above the slab is 2.27 square feet.

Cut or bend existing longitudinal #5-R bars & #5-R4 to clear segmental joint blockout by 2" as needed.

**Notes:**

Remove concrete in accordance with Sec 216.

Removal shall include removal of the existing expansion joint armor and anchorage as detailed and shall be completely covered by the unit price for Removal of Existing Expansion Joint & Adjacent Concrete.

Concrete removal to provide 1" minimum clearance beneath exposed reinforcing to remain. Removal depth may be increased as needed to accommodate new anchorage requirements for the replacement of joint as per manufacturer's recommendations.

Care should be taken to not damage conduit in barrier during removal. Any damage to existing conduit as a result of contractor's operations shall be repaired or replaced as required by the engineer at the contractor's expense.

Any existing concrete traffic delineators on the barrier removed during the joint replacement process shall be replaced with like and in kind and covered by the unit price for Remove and Replace Barrier Curb.

Barrier to be built parallel to grade with barrier joints on superstructure.

All exposed edges of barrier (Type B) shall match existing barrier edges.

Existing reinforcing may be replaced with like and in kind in accordance with Sec 216.

Any damage to the existing reinforcing epoxy coating shall be repaired according to Sec 710.

Concrete work shall be in accordance with Sec 704.

Cost for slab concrete, complete in place, for expansion joint replacement will be considered completely covered by the contract unit price for Class B-2 Concrete.

Cost for all concrete and reinforcement for curb, complete in place, will be considered completely covered by the contract unit price for Remove and Replace Barrier Curb.

Cost for furnishing and installing reinforcing steel for expansion joint replacement will be considered completely covered by the contract unit price for Reinforcing Steel (Epoxy Coated).

* Existing plans provided 3 1/2" gap from inside face of backwall to mounted 6"x 5/8" plate on superstructure at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed to match backwall and diaphragm faces.

** MBS refers to mechanical bar splices. Mechanical bar splices shall be in accordance with Sec 706 or 710 except that no measurement will be made for mechanical bar splices and they will be considered completely covered by the contract unit price for other items.

# SLAB DEMOLITION AND REPLACEMENT AT END BENTS

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Curtis Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

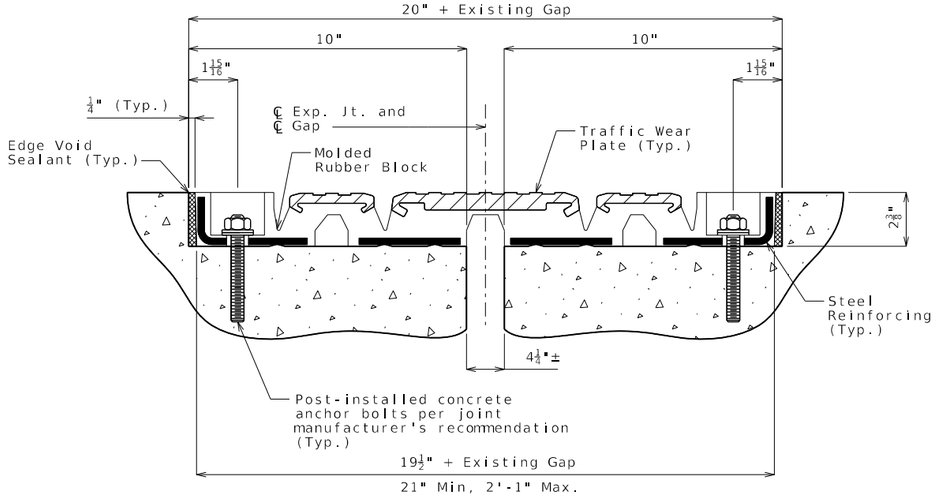
DATE PREPARED 2/24/2026
ROUTE 350 | STATE MO
DISTRICT BR | SHEET NO. 2
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A63341

DESCRIPTION | DATE

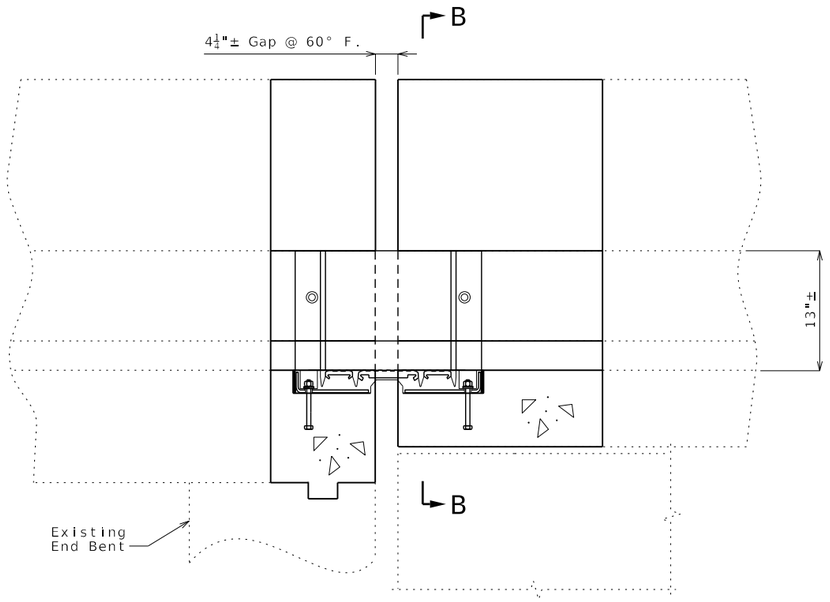
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

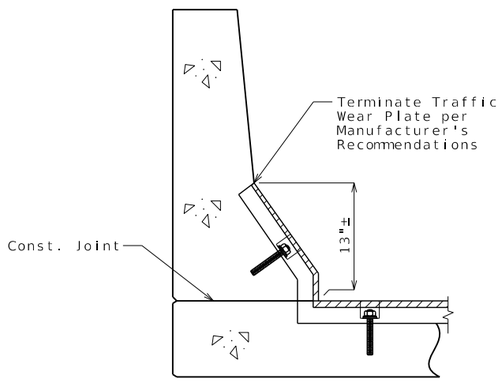
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SECTION THRU JOINT




PART ELEVATION OF BARRIER




SECTION B-B

Notes:

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

Replacement expansion joint shall be WaboFlex Model SR 4.0 as manufactured by Watson Bowman Acme Corp., Amherst, New York. The new joint is to be installed per manufacturer's recommendations.

The expansion device shall be fabricated to match the crown of the roadway.

All anchor bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A513).

* Existing plans provided 3 1/2" gap from leg of 8"x6"x 5/8" angle to mounted 6"x 5/8" plate on superstructure at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed to match backwall and diaphragm faces.

# SEGMENTAL EXPANSION JOINT SYSTEM AT END BENTS NO. 1 & 4

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



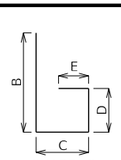
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 350 | STATE MO
DISTRICT BR | SHEET NO. 3
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A63341

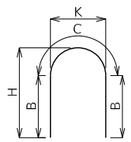
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

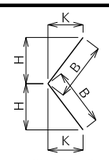
TRANSYSTEMS
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING



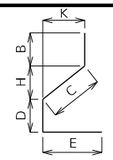
SHAPE 6
or 6S



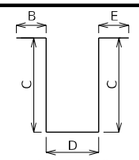
SHAPE 7



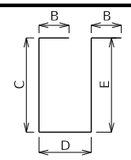
SHAPE 8
or 8S



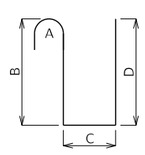
SHAPE 9
or 9S



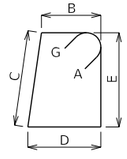
SHAPE 10
or 10S



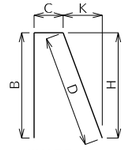
SHAPE 11
or 11S



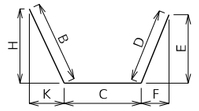
SHAPE 12



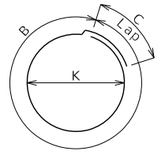
SHAPE 13S



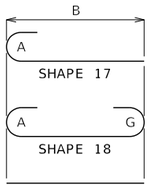
SHAPE 14
or 14S



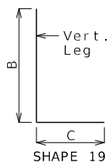
SHAPE 15
or 15S



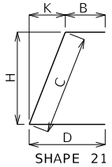
SHAPE 16



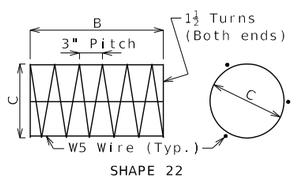
SHAPE 17
SHAPE 18
SHAPE 20



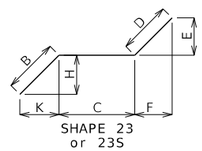
SHAPE 19
or 19S



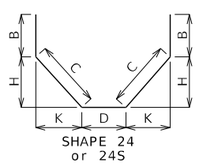
SHAPE 21
or 21S



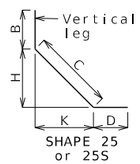
SHAPE 22



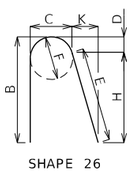
SHAPE 23
or 23S



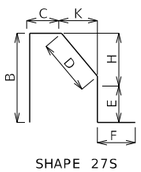
SHAPE 24
or 24S



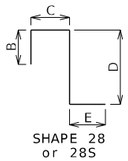
SHAPE 25
or 25S



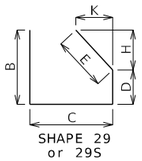
SHAPE 26



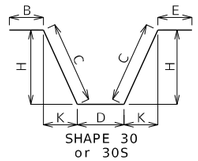
SHAPE 27S



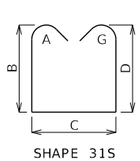
SHAPE 28
or 28S



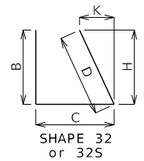
SHAPE 29
or 29S



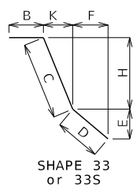
SHAPE 30
or 30S



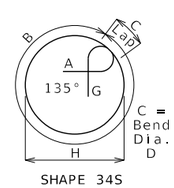
SHAPE 31S



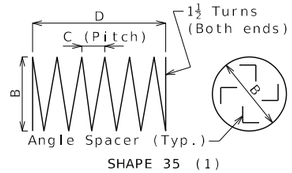
SHAPE 32
or 32S



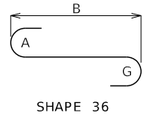
SHAPE 33
or 33S



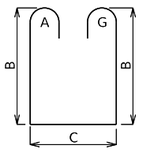
SHAPE 34S



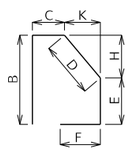
SHAPE 35 (1)



SHAPE 36



SHAPE 37S

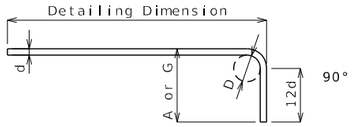


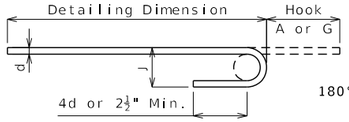
SHAPE 38S

## Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

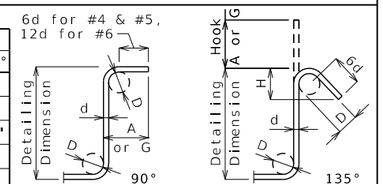
| Size | Case | D | A or G | | J |
|---|---|---|---|---|---|
| | | | 90° | 180° | 180° |
| #4 | 1 | 3" | 8" | 6" | 4" |
| #5 | 1 | 3¾" | 10" | 7" | 5" |
| #6 | 1 | 4½" | 12" | 8¼" | 6" |
| #7 | 2 | 5¼" | 14" | 9¾" | 7" |
| | 3 | 7" | 15" | 11½" | 8¾" |
| #8 | 2 | 6" | 16" | 11" | 8" |
| | 3 | 8" | 17" | 13¼" | 10" |
| #9 | 1 | 9½" | 19½" | 15½" | 11¾" |
| #10 | 1 | 10¾" | 22" | 17½" | 13¼" |
| #11 | 1 | 12" | 24½" | 19½" | 14⅞" |
| #14 | 1 | 18¼" | 31¼" | 27½" | 21⅝" |
| #18 | 1 | 24" | 41½" | 36¼" | 28½" |



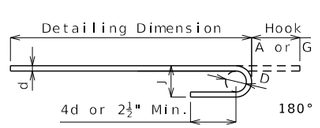

Stirrup Pin Bend Shapes (S)

| Size | Case | D | A or G | | | H | J |
|---|---|---|---|---|---|---|---|
| | | | 90° | 135° | 180° | 135° | 180° |
| #4 | 2 | 2" | 4½" | 4½" | 5" | 2⅞" | 3" |
| | 3 | 3" | 5" | 5¼" | 6" | 3" | 4" |
| #5 | 2 | 2½" | 5¾" | 5¾" | 5¾" | 3⅝" | 3¾" |
| | 3 | 3¾" | 6¼" | 6½" | 7" | 3⅞" | 5" |
| #6 | 1 | 4½" | 12" | 7¾" | 8¼" | 4⅝" | 6" |




Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.




## BENDING DIAGRAMS

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

Reinforcing steel (ASTM A615 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

(1) Shall be a deformed or plain spiral bar or wire.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

| | Size | Substructure | | Superstructure | | | Entire Bridge | |
|---|---|---|---|---|---|---|---|---|
| | | Plain | Epoxy | Slab | Barrier | Slip Form | Plain | Epoxy |
| By Size | W5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 0 | 0 | 0 | 178 | 0 | 0 | 178 |
| | 6 | 0 | 0 | 434 | 0 | 0 | 0 | 434 |
| | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| By Type | | 0 | 0 | 434 | 178 | 0 | 0 | 612 |

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.

Bill of Reinforcing Steel

| No. Req. | Size/ Mark | Location | Codes C | SH | V | Dimensions B ft in. | C ft in. | D ft in. | E ft in. | F ft in. | H ft in. | K ft in. | Nom. Length ft in. | Actual Length ft in. | Weight lb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Abutment | | | | | | | | | | | | | |
| 4 | 6 H101 | BACKWALL | E | 20 | | 36 2.00 | | | | | | | 36 2 | 36 2 | 217 |
| 4 | 6 H102 | BACKWALL | E | 20 | | 36 2.00 | | | | | | | 36 2 | 36 2 | 217 |
| | | Barrier | | | | | | | | | | | | | |
| 12 | 5 R1 | BARRIER | E | 26S | | 2 6.00 | 4.00 | 2 5.13 | | | 2 6.00 | 3.00 | 4 11 | 4 11 | 62 |
| 12 | 5 R3 | BARRIER | E | 19S | | 17.00 | 6.00 | | | | | | 23 | 22 | 23 |
| 12 | 5 R4 | BARRIER | E | 27S | | | 6.00 | 11.25 | 7.00 | 12.00 | 9.25 | 6.38 | 3 0 | 2 11 | 37 |
| 8 | 5 K1 | BARRIER | E | 19S | | 3 1.00 | 5.13 | | | | | | 3 6 | 3 4 | 28 |
| 8 | 5 K2 | BARRIER | E | 14S | | 5.13 | 19.13 | 18.00 | | | 2.00 | 17.88 | 3 6 | 3 4 | 28 |

# BILL OF REINFORCING STEEL

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

| ROUTE | STATE |
|---|---|
| 350 | MO |
| DISTRICT | SHEET NO. |
| BR | 4 |

COUNTY JACKSON

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A63341

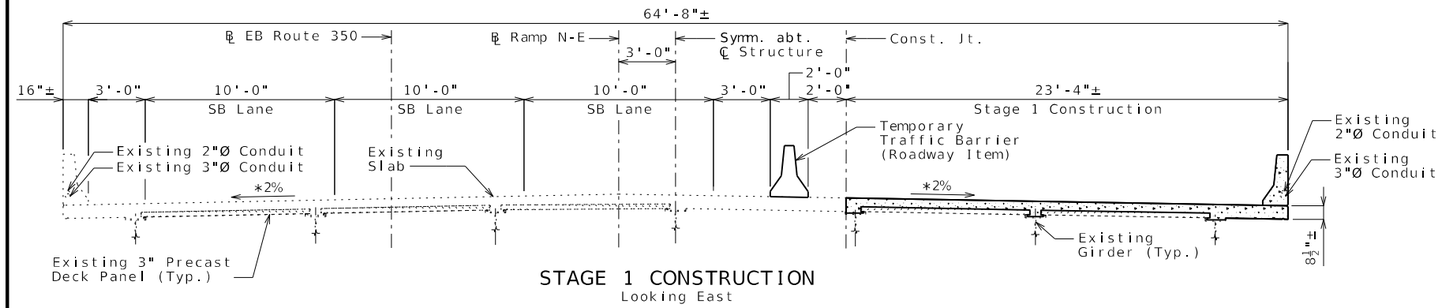
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
MoDOT

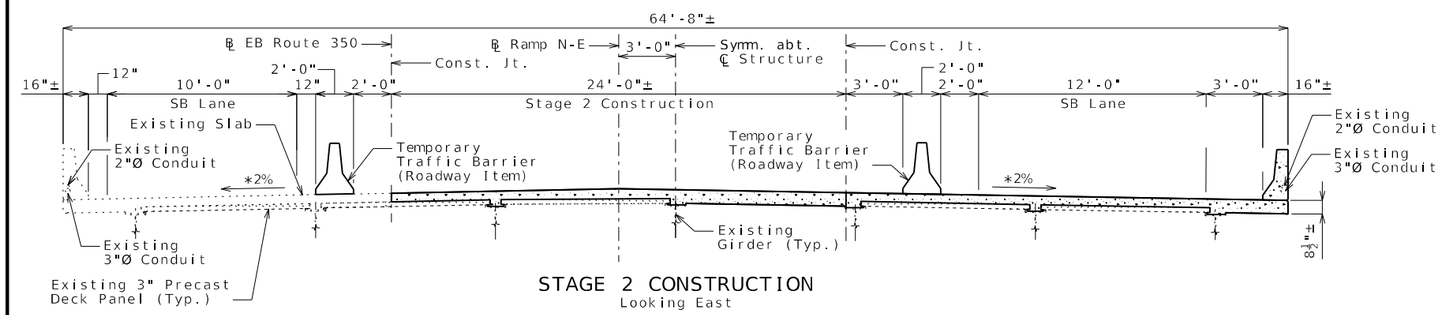
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

SEC/SUR 25 TWP 49N RGE 33W

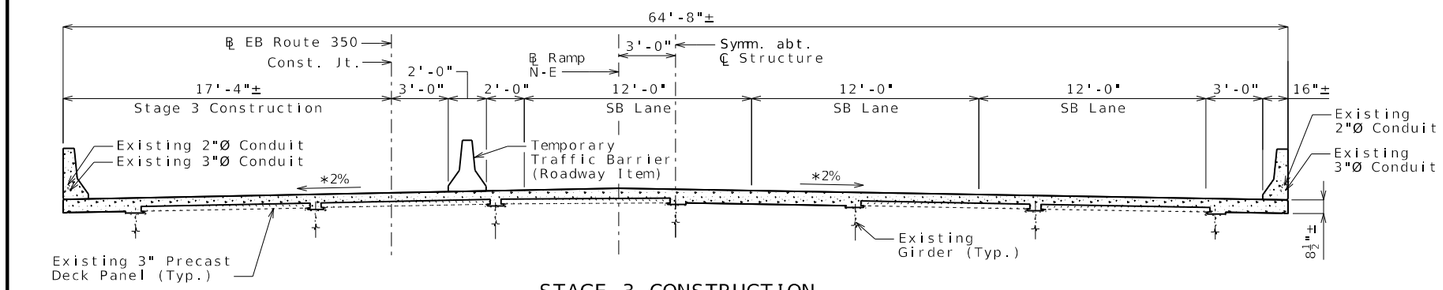
# U.I.P. AND REHABILITATE EXISTING (167'-220'-189') CONTINUOUS COMPOSITE PLATE GIRDER SPANS (SKEW: 56° RA)




## STAGE 1 CONSTRUCTION
Looking East




## STAGE 2 CONSTRUCTION
Looking East




## STAGE 3 CONSTRUCTION
Looking East

Notes:
* Final slope shall match existing.
Existing long. bars and barrier reinf. not shown for clarity.
Temporary traffic barrier shall not be attached to bridge deck.

## General Notes:

**Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications

Bridge Deck Rating = 6

**Design Loading:**

HS20-44 (Existing and New Construction)

**Design Unit Stresses:**

| | |
|---|---|
| Class B-2 Concrete (Superstructure, except Barrier) | f'c = 4,000 psi |
| Class B-1 Concrete (Barrier) | f'c = 4,000 psi |
| Reinforcing Steel (ASTM A615 Grade 60) | fy = 60,000 psi |

**Reinforcing Steel:**

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

**Miscellaneous:**

Roadway surfacing adjacent to bridge ends shall match existing bridge deck (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

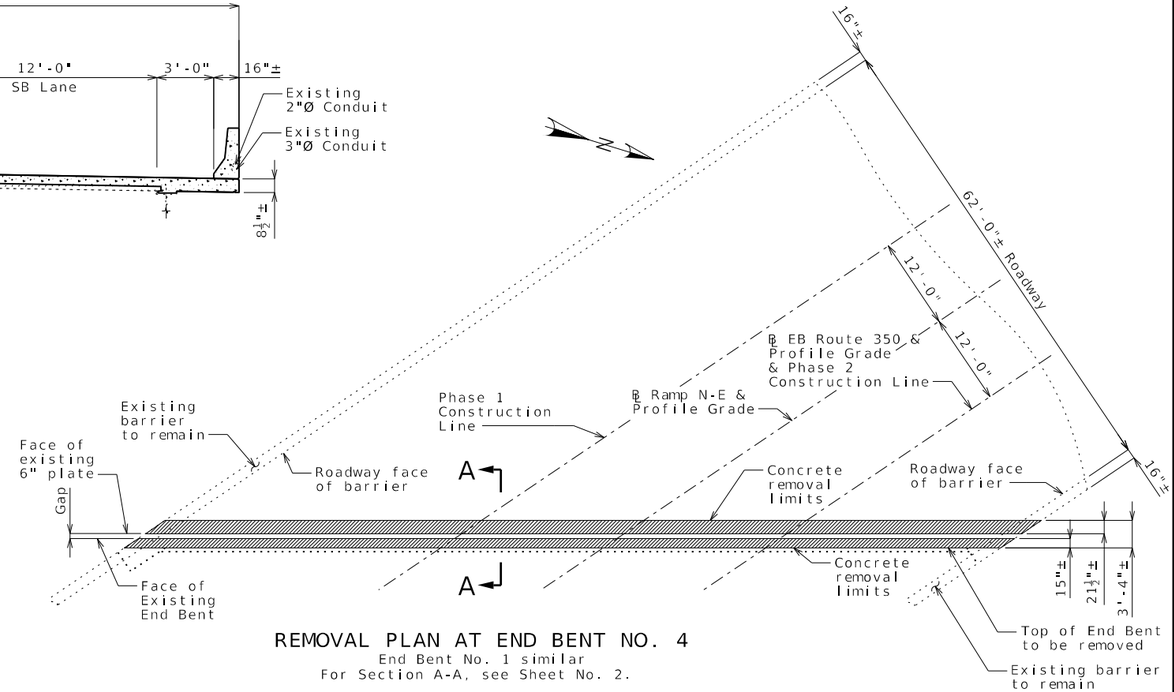
Bars bonded in existing concrete not removed shall be clearly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before finalizing the shop drawings.

**Traffic Handling:**

Traffic to be maintained during construction. See roadway plans for additional traffic control.




## REMOVAL PLAN AT END BENT NO. 4
End Bent No. 1 similar
For Section A-A, see Sheet No. 2.

## Estimated Quantities

| Item | | Total |
|---|---|---|
| Removal of Existing Expansion Joint & Adjacent Concrete | linear foot | 231 |
| Remove and Replace Barrier Curb | linear foot | 12 |
| Class B-2 Concrete | cu. yard | 14.5 |
| Reinforcing Steel (Epoxy Coated) | pound | 690 |
| Segmental Expansion Joint System | linear foot | 222 |
| | | |
| | | |
| | | |

## REPAIRS TO BRIDGE: ROUTE 350 EB OVER ROUTE I-435 NB & RAMP SW

ROUTE 350 EB FROM ROUTE 40 TO ROUTE 350
ABOUT 2.0 MILES NORTHWEST OF RAYTOWN, MISSOURI
TIE STATION 87+13.38± (Match Existing)

Designed 10/2025
Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



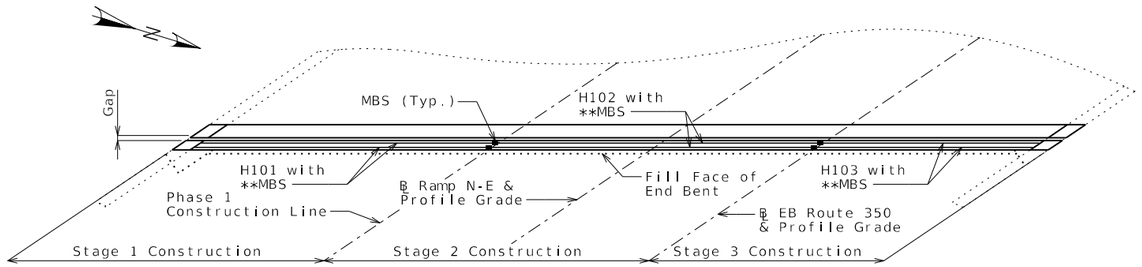
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 350 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A63351

DESCRIPTION | DATE

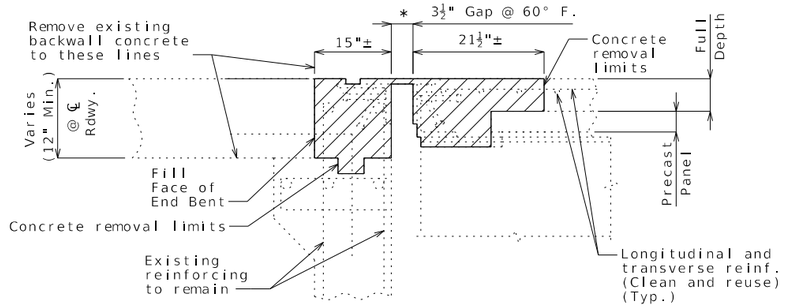
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING

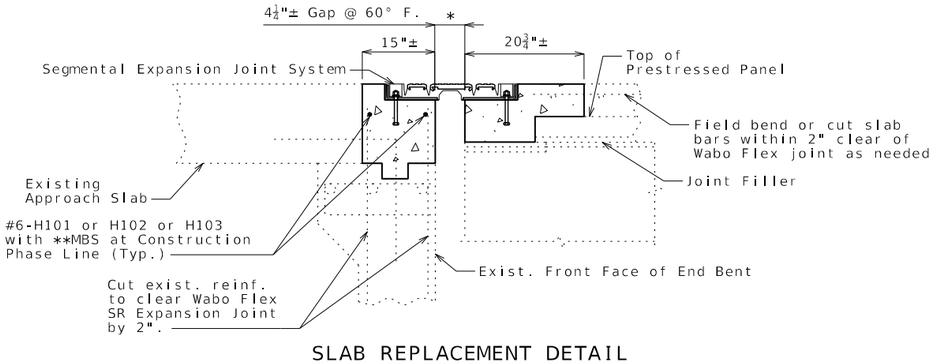



## SLAB REPLACEMENT DETAIL AT END BENT NO. 4

End Bent No. 1 similar

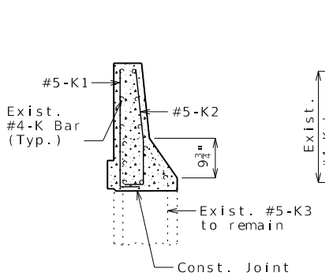



## SECTION A-A

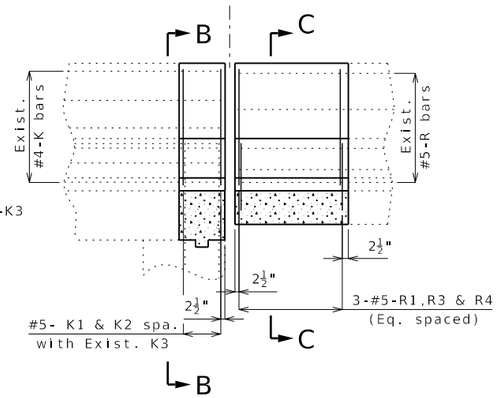



## SLAB REPLACEMENT DETAIL

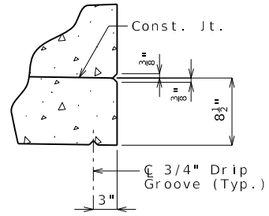
Note: Full depth slab replacement required over girders and overhangs.



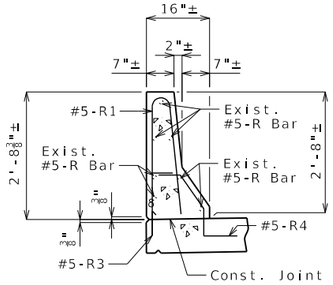

## SECTION B-B




## PART ELEVATION OF BARRIER




## DRIP GROOVE DETAIL




## SECTION C-C

The cross-sectional area above the slab is 2.27 square feet.

Cut or bend existing longitudinal #5-R bars & #5-R4 to clear segmental joint blockout by 2" as needed.

**Notes:**

Remove concrete in accordance with Sec 216.

Removal shall include removal of the existing expansion joint armor and anchorage as detailed and shall be completely covered by the unit price for Removal of Existing Expansion Joint & Adjacent Concrete.

Concrete removal to provide 1" minimum clearance beneath exposed reinforcing to remain. Removal depth may be increased as needed to accommodate new anchorage requirements for the replacement of joint as per manufacturer's recommendations.

Care should be taken to not damage conduit in barrier during removal. Any damage to existing conduit as a result of contractor's operations shall be repaired or replaced as required by the engineer at the contractor's expense.

Any existing concrete traffic delineators on the barrier removed during the joint replacement process shall be replaced with like and in kind and covered by the unit price for Remove and Replace Barrier Curb.

Barrier to be built parallel to grade with barrier joints on superstructure.

All exposed edges of barrier (Type B) shall match existing barrier edges.

Existing reinforcing may be replaced with like and in kind in accordance with Sec 216.

Any damage to the existing reinforcing epoxy coating shall be repaired according to Sec 710.

Concrete work shall be in accordance with Sec 704.

Cost for slab concrete, complete in place, for expansion joint replacement will be considered completely covered by the contract unit price for Class B-2 Concrete.

Cost for all concrete and reinforcement for curb, complete in place, will be considered completely covered by the contract unit price for Remove and Replace Barrier Curb.

Cost for furnishing and installing reinforcing steel for expansion joint replacement will be considered completely covered by the contract unit price for Reinforcing Steel (Epoxy Coated).

* Existing plans provided 3 1/2" gap from inside face of backwall to mounted 6"x 5/8" plate on superstructure at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed to match backwall and diaphragm faces.

** MBS refers to mechanical bar splices. Mechanical bar splices shall be in accordance with Sec 706 or 710 except that no measurement will be made for mechanical bar splices and they will be considered completely covered by the contract unit price for other items.

# SLAB DEMOLITION AND REPLACEMENT AT END BENTS

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 2 of 4

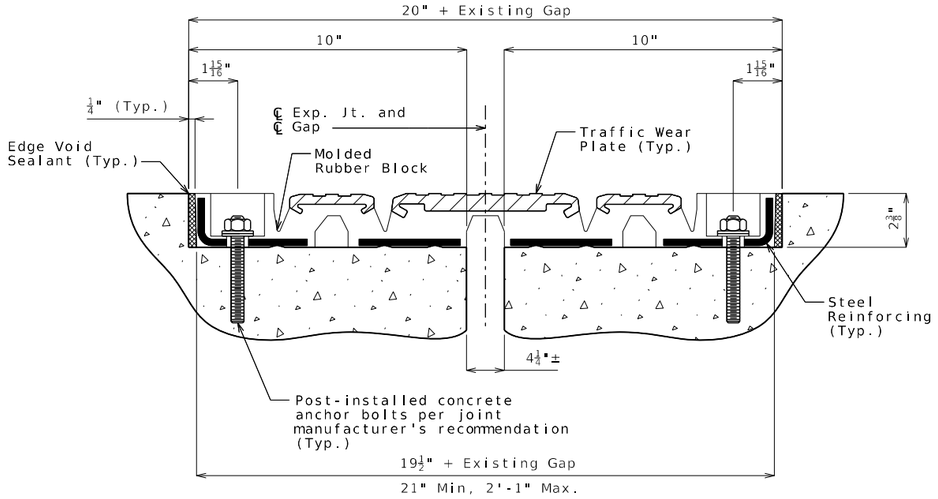

STATE OF MISSOURI
Caris Humphrey
NUMBER PE-2012027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.


DATE PREPARED: 2/24/2026
ROUTE: 350 | STATE: MO
DISTRICT: BR | SHEET NO.: 2
COUNTY: JACKSON
JOB NO.: J4P3093
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A63351

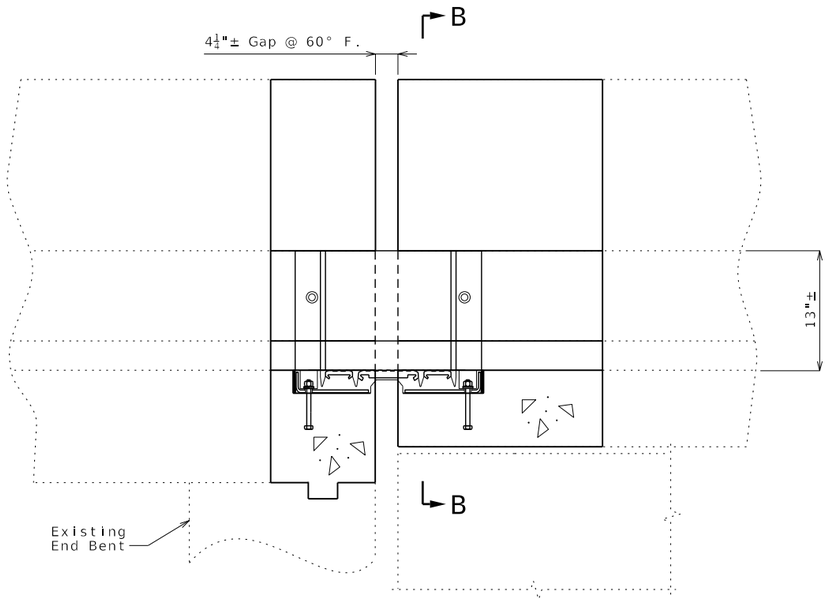
DESCRIPTION | DATE


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

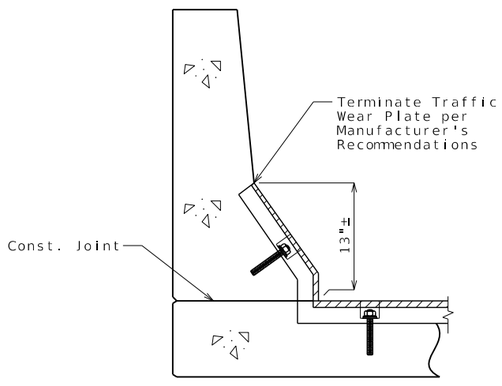
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING




SECTION THRU JOINT




PART ELEVATION OF BARRIER




SECTION B-B

Notes:

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

Replacement expansion joint shall be WaboFlex Model SR 4.0 as manufactured by Watson Bowman Acme Corp., Amherst, New York. The new joint is to be installed per manufacturer's recommendations.

The expansion device shall be fabricated to match the crown of the roadway.

All anchor bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A513).

* Existing plans provided 3 1/2" gap from leg of 8"x6"x 5/8" angle to mounted 6"x 5/8" plate on superstructure at 60° F. at time of construction. For replacement joint, adjust gap dimensions as needed to match backwall and diaphragm faces.

# SEGMENTAL EXPANSION JOINT SYSTEM AT END BENTS NO. 1 & 4

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



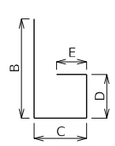
STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2002027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026
ROUTE 350 | STATE MO
DISTRICT BR | SHEET NO. 3
COUNTY JACKSON
JOB NO. J4P3093
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A63351

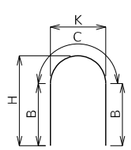
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

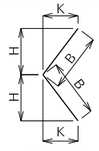
TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601
TRANSYSTEMS
MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING



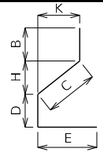
SHAPE 6
or 6S



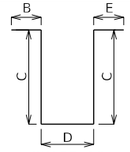
SHAPE 7



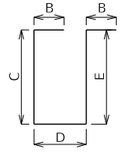
SHAPE 8
or 8S



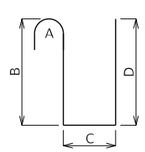
SHAPE 9
or 9S



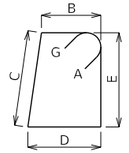
SHAPE 10
or 10S



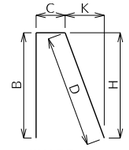
SHAPE 11
or 11S



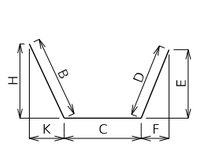
SHAPE 12



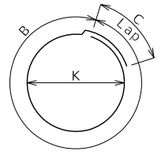
SHAPE 13S



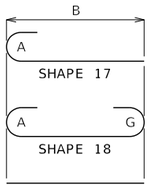
SHAPE 14
or 14S



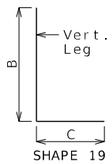
SHAPE 15
or 15S



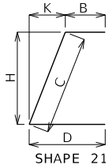
SHAPE 16



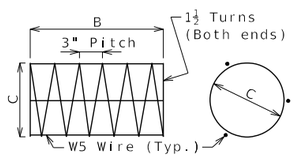
SHAPE 17
SHAPE 18
SHAPE 20



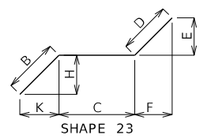
SHAPE 19
or 19S



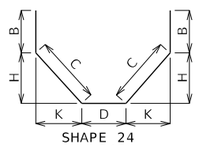
SHAPE 21
or 21S



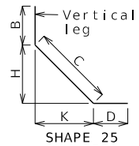
SHAPE 22



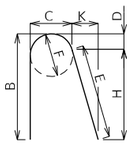
SHAPE 23
or 23S



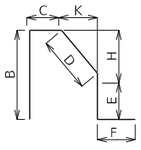
SHAPE 24
or 24S



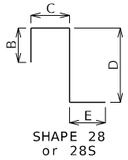
SHAPE 25
or 25S



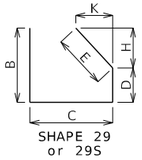
SHAPE 26



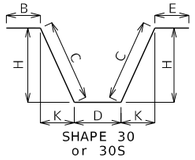
SHAPE 27S



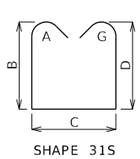
SHAPE 28
or 28S



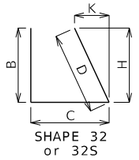
SHAPE 29
or 29S



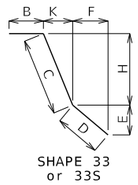
SHAPE 30
or 30S



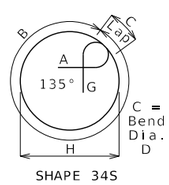
SHAPE 31S



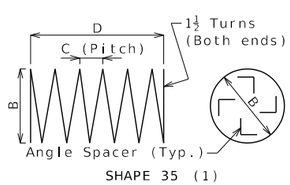
SHAPE 32
or 32S



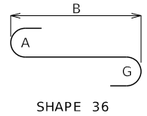
SHAPE 33
or 33S



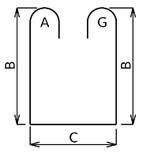
SHAPE 34S



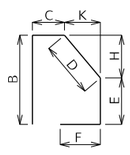
SHAPE 35 (1)



SHAPE 36



SHAPE 37S

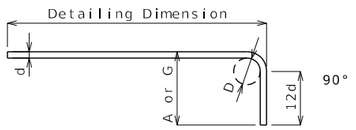


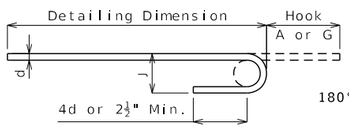
SHAPE 38S

## Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

| Size | Case | D | A or G | | J |
|---|---|---|---|---|---|
| | | | 90° | 180° | 180° |
| #4 | 1 | 3" | 8" | 6" | 4" |
| #5 | 1 | 3¾" | 10" | 7" | 5" |
| #6 | 1 | 4½" | 12" | 8¼" | 6" |
| #7 | 2 | 5¼" | 14" | 9¾" | 7" |
| | 3 | 7" | 15" | 11½" | 8¾" |
| #8 | 2 | 6" | 16" | 11" | 8" |
| | 3 | 8" | 17" | 13¼" | 10" |
| #9 | 1 | 9½" | 19½" | 15½" | 11¾" |
| #10 | 1 | 10¾" | 22" | 17½" | 13¼" |
| #11 | 1 | 12" | 24½" | 19½" | 14⅞" |
| #14 | 1 | 18¼" | 31¼" | 27½" | 21⅝" |
| #18 | 1 | 24" | 41½" | 36¼" | 28½" |



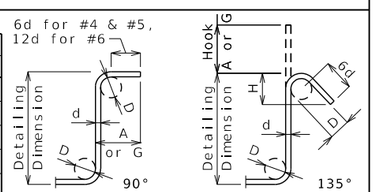



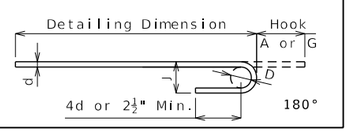

Stirrup Pin Bend Shapes (S)

| Size | Case | D | A or G | | H | J |
|---|---|---|---|---|---|---|
| | | | 90° | 135° | 180° | 135° | 180° |
| #4 | 2 | 2" | 4½" | 4½" | 5" | 2⅞" | 3" |
| | 3 | 3" | 5" | 5¼" | 6" | 3" | 4" |
| #5 | 2 | 2½" | 5¾" | 5¾" | 5¾" | 3⅝" | 3¾" |
| | 3 | 3¾" | 6¼" | 6½" | 7" | 3⅞" | 5" |
| #6 | 1 | 4½" | 12" | 7¾" | 8¼" | 4⅝" | 6" |

Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.




## BENDING DIAGRAMS

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

Reinforcing steel (ASTM A615 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

(1) Shall be a deformed or plain spiral bar or wire.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

| | Size | Substructure | | Superstructure | | | Entire Bridge | |
|---|---|---|---|---|---|---|---|---|
| | | Plain | Epoxy | Slab | Barrier | Slip Form | Plain | Epoxy |
| By Size | W5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 0 | 0 | 0 | 178 | 0 | 0 | 178 |
| | 6 | 0 | 0 | 689 | 0 | 0 | 0 | 689 |
| | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| By Type | | 0 | 0 | 689 | 178 | 0 | 0 | 867 |

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.

Bill of Reinforcing Steel

| No. Req. | Size/ Mark | Location | Codes C | SH | V | Dimensions B ft in. | C ft in. | D ft in. | E ft in. | F ft in. | H ft in. | K ft in. | Nom. Length ft in. | Actual Length ft in. | Weight lb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Abutment | | | | | | | | | | | | | |
| 4 | 6 H101 | BACKWALL | E | 20 | | 41 3.00 | | | | | | | 41 3 | 41 3 | 248 |
| 4 | 6 H102 | BACKWALL | E | 20 | | 42 11.00 | | | | | | | 42 11 | 42 11 | 258 |
| 4 | 6 H103 | BACKWALL | E | 20 | | 30 6.00 | | | | | | | 30 6 | 30 6 | 183 |
| | | Barrier | | | | | | | | | | | | | |
| 12 | 5 R1 | BARRIER | E | 26S | | 2 5.00 | 4.00 | 2 5.13 | | | 2 5.00 | 3.00 | 4 11 | 4 11 | 62 |
| 12 | 5 R3 | BARRIER | E | 19S | | 17.00 | 6.00 | | | | | | 23 | 22 | 23 |
| 12 | 5 R4 | BARRIER | E | 27S | | | 6.00 | 11.25 | 7.00 | 12.00 | 9.25 | 6.38 | 3 0 | 2 11 | 37 |
| 8 | 5 K1 | BARRIER | E | 19S | | 3 1.00 | 5.13 | | | | | | 3 6 | 3 4 | 28 |
| 8 | 5 K2 | BARRIER | E | 14S | | 5.13 | 19.13 | 18.00 | | | 2.00 | 17.88 | 3 6 | 3 4 | 29 |

# BILL OF REINFORCING STEEL

Detailed 11/2025
Checked 12/2025

Note: This drawing is not to scale. Follow dimensions.



STATE OF MISSOURI
Carla Humphrey
NUMBER PE-2020027931
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 2/24/2026

| ROUTE | STATE |
|---|---|
| 350 | MO |
| DISTRICT | SHEET NO. |
| BR | 4 |

COUNTY JACKSON

JOB NO. J4P3093

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A63351

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRANSYSTEMS CORP.
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MO 64108
PHONE: (816)329-8600
FAX: (816)329-8601

TRANSYSTEMS

MO STATE CERTIFICATE OF AUTHORITY # 273
ENGINEERING