DESIGN DESIGNATION

A.A.D.T. - 2023 = 19,000
A.A.D.T. - 2043 = 21,500
D.H.V. = 7%
T = 5%
V = 35 M.P.H.
D = 52%

FUNCTIONAL CLASSIFICATION-PRINCIPAL ARTERIAL

RIGHT OF WAY ACQUISITION

EASEMENT AQUISITION

NORMAL RIGHT OF WAY

CONVENTIONAL SYMBOLS

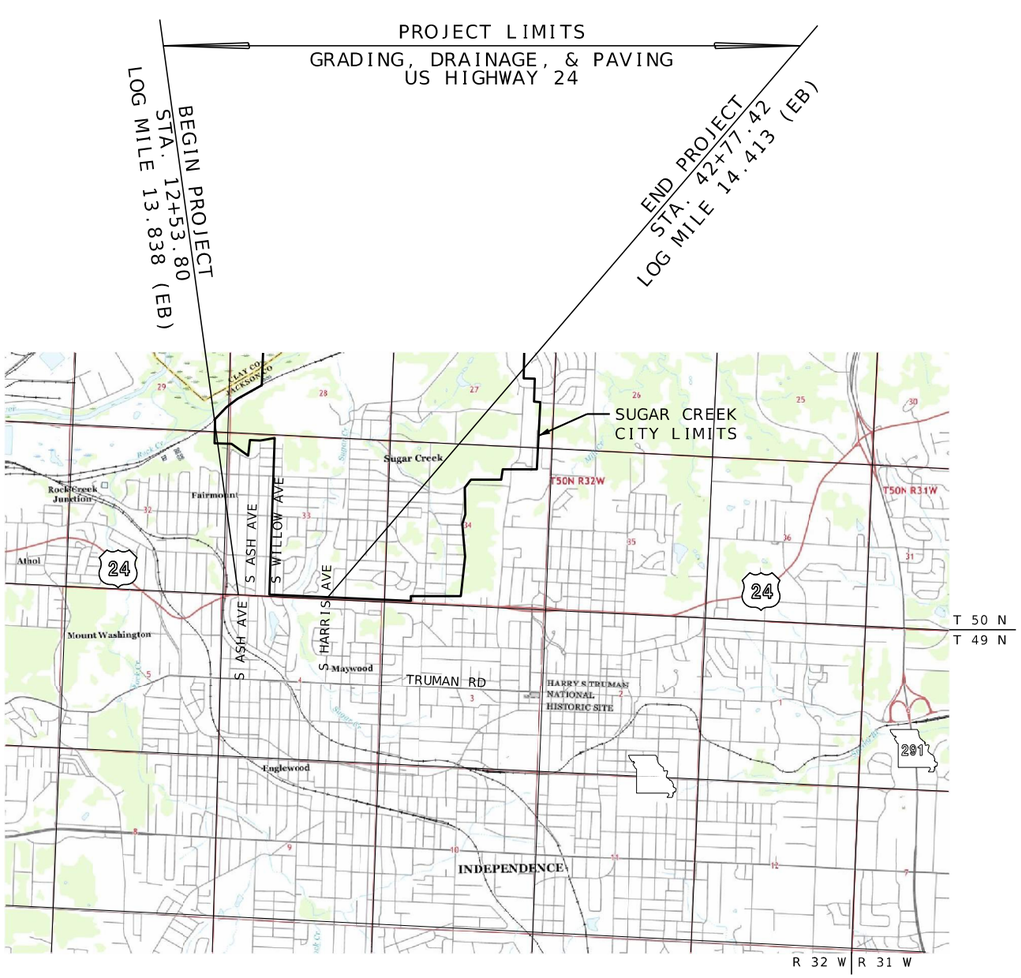
(USED IN PLANS)

	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	-FO-	FO
OVERHEAD TELEPHONE		
UNDERGROUND TELEPHONE	-T-	T
OVERHEAD POWER		
UNDERGROUND POWER	-P-	P
GAS	-G-	G
WATER	-W-	W
MANHOLE	SAN	
FIRE HYDRANT	HYD	
WATER VALVE	WV	
WATER METER	WM	
DROP INLET	DI	
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 24 JACKSON COUNTY



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
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QUANTITIES (QU) (11 SHEETS)	3
PLAN-PROFILE (PP)	4-21
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REFERENCE POINTS (RP)	31
COORDINATE POINTS (CP)	32-33
SPECIAL SHEETS (SS)	34-69
TRAFFIC CONTROL SHEETS (TC)	70-83
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SIGNALS (SG)	102-115
SIGNING (SN)	116-128
LIGHTING (LT)	129-137
PAVEMENT MARKING (PM)	138-146
CULVERT SECTIONS (CS)	147-150
WATER LINE (WL)	151-173
CROSS SECTIONS (XS)	1-64

LENGTH OF PROJECT

BEGINNING OF PROJECT	STA. 12+53.80	
END OF PROJECT	STA. 42+77.42	
APPARENT LENGTH	3,023.62	FEET
TOTAL CORRECTIONS	0	FEET
NET LENGTH OF PROJECT	3,023.62	FEET
STATE LENGTH	0.572	MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	4.90	ACRES

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010030879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 8/11/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	1

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

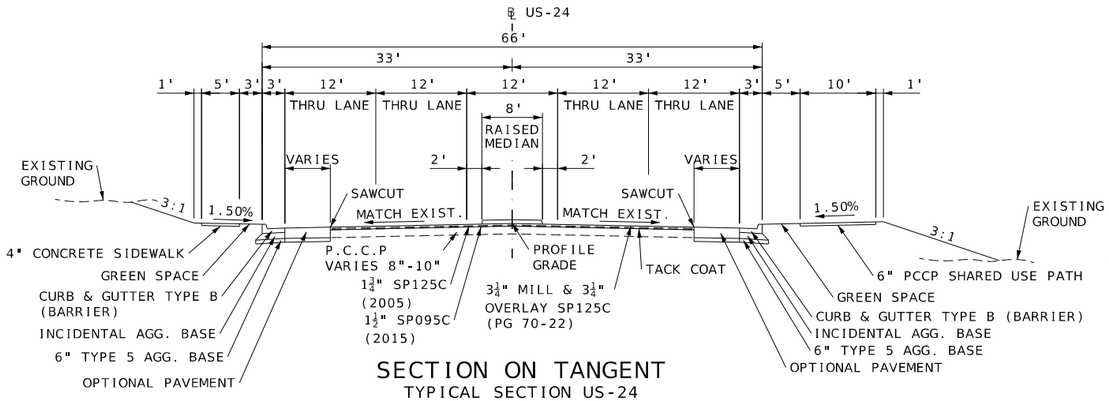
DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

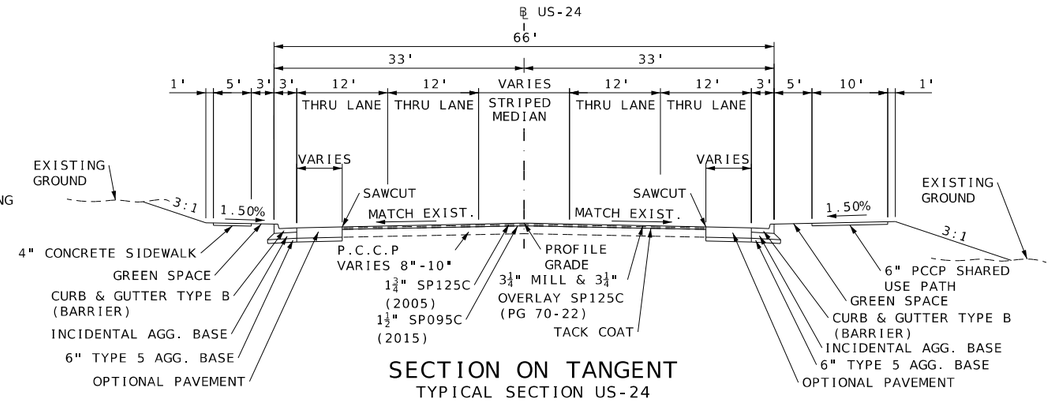
REV.

c:\bmcd_lib\pw_connect\trn2\d0119460\001_TITLE_JKU0226_I1.dgn 9:23:18 AM



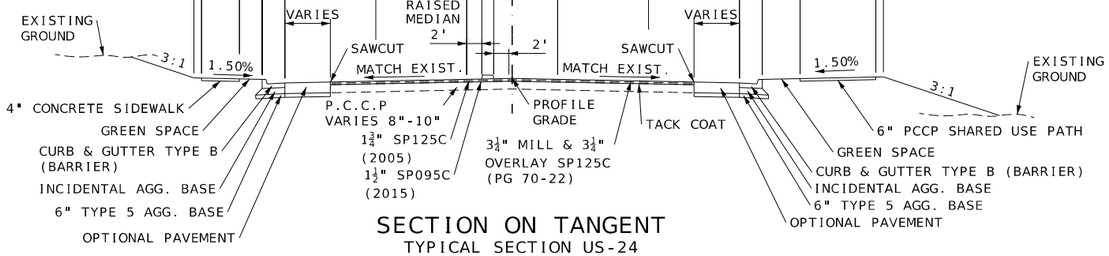
SECTION ON TANGENT
TYPICAL SECTION US-24

STA. 12+51.50 TO STA. 13+32.74
STA. 18+53.81 TO STA. 25+00.00
STA. 29+64.83 TO STA. 30+83.80



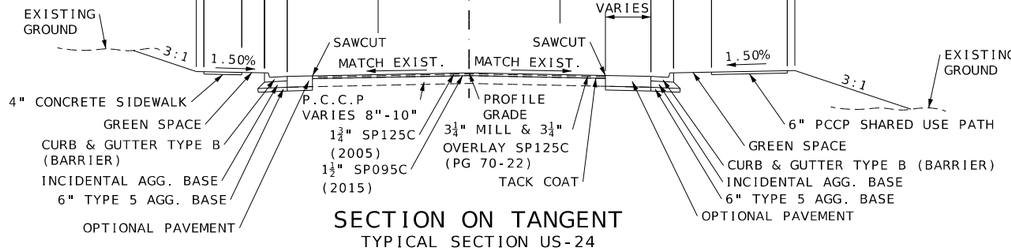
SECTION ON TANGENT
TYPICAL SECTION US-24

STA. 13+75.71 TO STA. 14+32.77
STA. 17+53.69 TO STA. 18+10.73
STA. 25+44.92 TO STA. 26+00.00
STA. 30+83.80 TO STA. 32+50.35



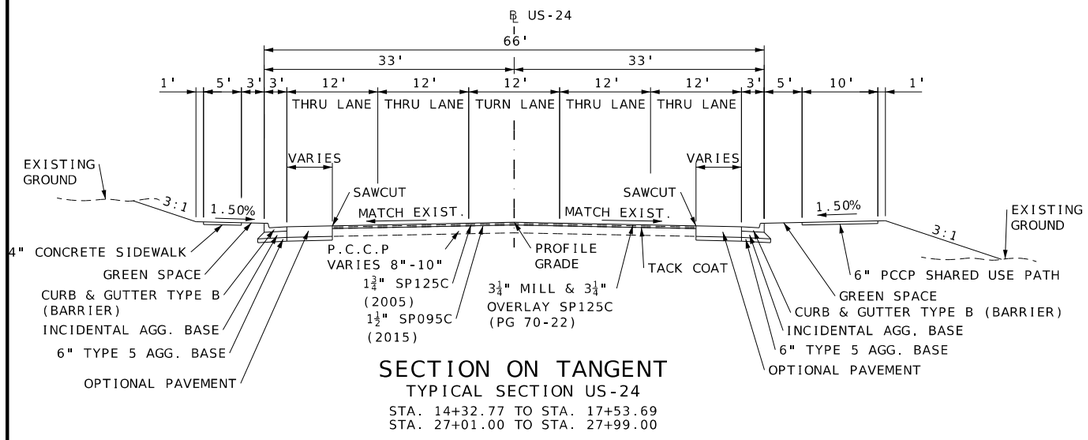
SECTION ON TANGENT
TYPICAL SECTION US-24

STA. 13+32.74 TO STA. 13+75.71
STA. 18+10.73 TO STA. 18+53.81
STA. 25+00.00 TO STA. 27+01.00
STA. 27+99.00 TO STA. 29+64.83



SECTION ON TANGENT
TYPICAL SECTION US-24

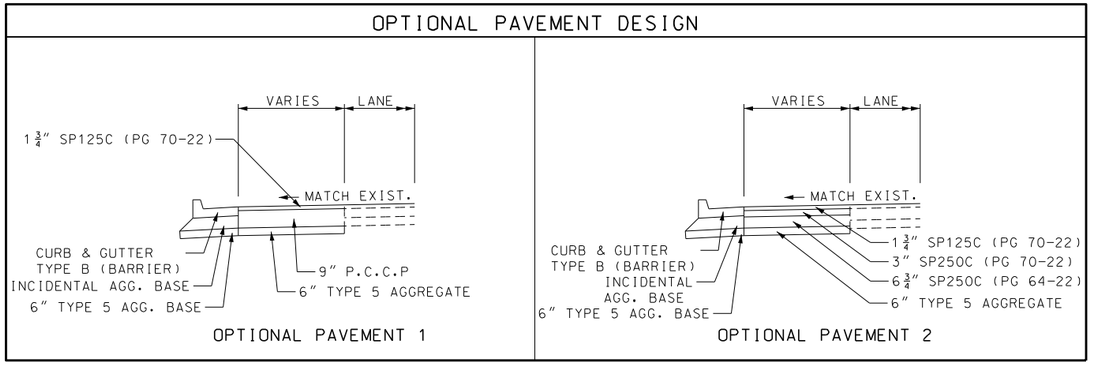
STA. 32+50.35 TO STA. 42+77.42



SECTION ON TANGENT
TYPICAL SECTION US-24

STA. 14+32.77 TO STA. 17+53.69
STA. 27+01.00 TO STA. 27+99.00

OPTIONAL PAVEMENT DESIGN



ESTIMATE FACTORS (FOR INFORMATION ONLY)
ASPH. CONC. MIXTURE PG70-22 (SP125C MIX) = 1.970 TON/CY
ASPH. CONC. MIXTURE PG70-22 (SP250C MIX) = 2.036 TON/CY
ASPH. CONC. MIXTURE PG64-22 (SP250C MIX) = 2.036 TON/CY
ASPH. CONC. MIXTURE PG64-22 (BASE) = 2.005 TON/CY

TYPICAL SHEET
SHEET 1 OF 9

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

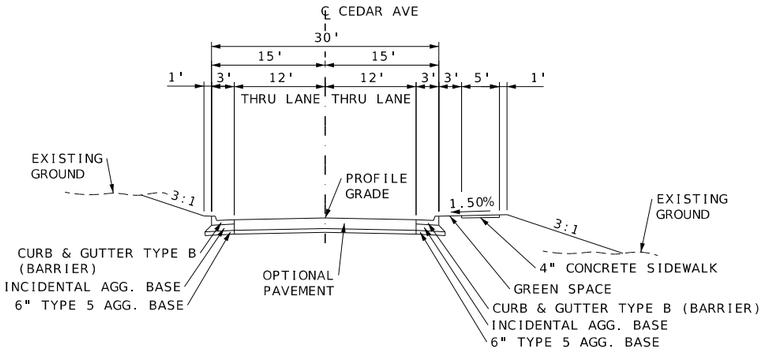
DATE PREPARED: 8/4/2025
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 2
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE | REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

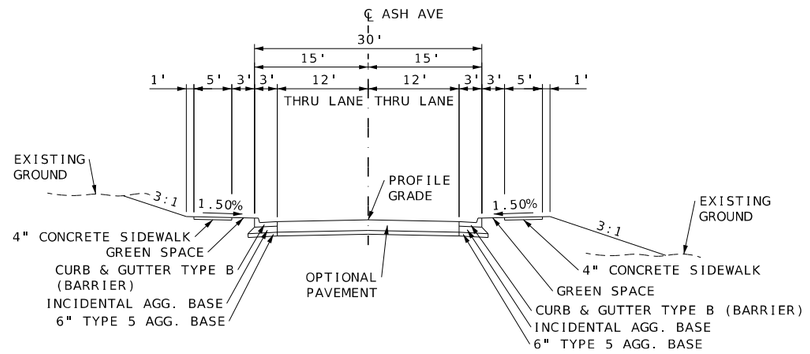
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165



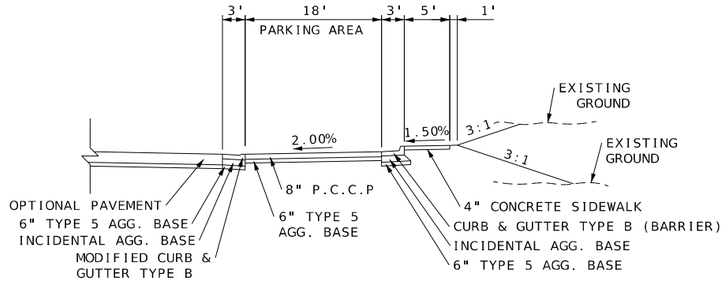
SECTION ON TANGENT
CEDAR AVE

STA. 200+00.00 TO STA. 206+67.74



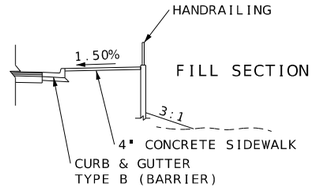
SECTION ON TANGENT
ASH AVE

STA. 100+00.00 TO STA. 102+20.96



ON STREET PARKING SECTION CEDAR AVE

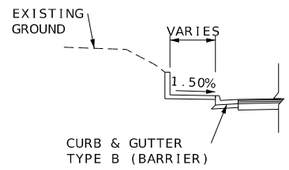
CEDAR AVE - STA. 200+98.05 TO STA. 201+58.63 RT
CEDAR AVE - STA. 202+69.72 TO STA. 203+95.26 RT
CEDAR AVE - STA. 205+11.98 TO STA. 206+10.98 RT



NOTE: FINAL RETAINING WALL DESIGN TO BE DETERMINED.

FILL RETAINING WALL

HWY 24 - STA. 12+83.40 TO STA. 12+88.02 RT
HWY 24 - STA. 35+65.82 TO STA. 41+03.54 LT
HWY 24 - STA. 35+80.86 TO STA. 37+78.03 RT



NOTE: FINAL RETAINING WALL DESIGN TO BE DETERMINED.

CUT RETAINING WALL

HWY 24 - STA. 12+77.75 TO STA. 12+90.86 RT
HWY 24 - STA. 12+86.24 TO STA. 13+21.69 RT
ASH AVE. - 100+58.27 TO STA. 101+50.00 LT
ASH AVE. - 100+36.30 TO STA. 101+00.00 RT

TYPICAL SHEET
SHEET 2 OF 9

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 8/4/2025
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 2
COUNTY: JACKSON
JOB NO.: JKU0226
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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

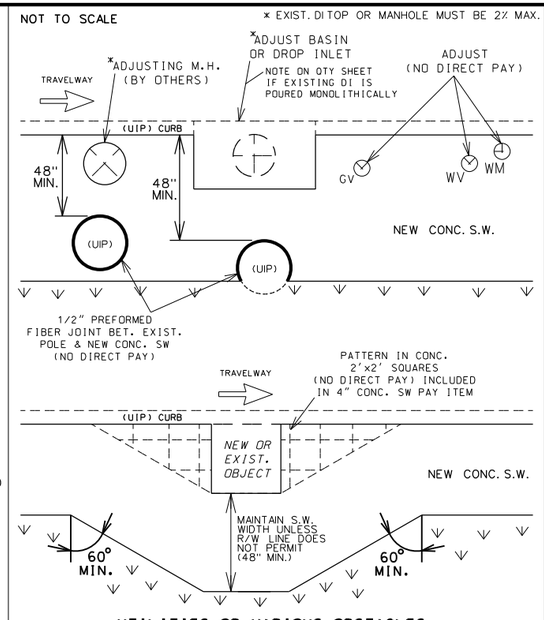
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

1. CONCRETE SIDEWALK, CURB RAMP AND DETECTABLE WARNING DEVICE (TRUNCATED DOMES) DETAILS SHALL CONFORM TO ADA REQUIREMENTS UNLESS NOTED OTHERWISE IN THESE PLANS. FOR SIDEWALK JOINT AND CURB DETAILS, SEE STANDARD PLAN 609.00.
2. TINTED CONCRETE SHALL NOT BE USED. TRUNCATED DOMES SHALL BE OF A COLOR CONTRASTING WITH UNTINTED CONCRETE AND APPROVED BY THE ENGINEER. TRUNCATED DOMES ARE REQ'D. AT STREET INTERSECTIONS AND COMMERCIAL ENTRANCES WITH TRAFFIC CONTROL ONLY. (STOP/YIELD SIGNS OR SIGNALS)
3. CONCRETE SHALL BE IN ACCORDANCE WITH SEC. 608 & SEC. 609. CURING COMPOUND SHALL BE TRANSPARENT.
4. ALL CONCRETE SIDEWALK AND CURB RAMP/TRANSITION/LANDING AREAS SHALL BE 4" THICK, WITH THE EXCEPTION OF THE BOTTOM TRANSITION WHICH TIES INTO THE EXISTING PAVED APPROACH AND ROADWAY. THIS TRANSITION, OR LANDING AREA, MUST BE 8" THICK IF IT FALLS WITHIN THE RADIUS OF THE APPROACH AND SITS AT THE BACK OF CURB OF THE ROADWAY. ALL CONCRETE SIDEWALK AND CURB RAMP/TRANSITION/LANDING AREAS SHALL BE ON 4" TYPE 1 AGGREGATE BASE.
5. AGGREGATE BASE DENSITY - CONTRACTOR SHALL EXERCISE GOOD COMPACTIVE EFFORT AS APPROVED BY THE ENGINEER. DENSITY REQUIREMENTS BY NUCLEAR METHOD WILL NOT BE REQUIRED DUE TO WORK AREA CONSTRAINTS.
6. CONCRETE CURB RAMP - WIDTH = 5' MIN. LENGTH = 5' MIN. TO 15' PREFERRED MAX. (16' MAX.)
   RUNNING SLOPE = >5% (MIN.) TO 8.33% (MAX.) UNIFORMLY DOWN THE LENGTH OF THE RAMP.

   CONCRETE LANDING - WIDTH = MATCH NEW CURB RAMP AND SIDEWALK WIDTH LENGTH = 5' MIN.
   SLOPE IN ALL DIRECTIONS = 1% PREFFERED (2% MAX.) UNLESS TIED TO ROADWAY EXCEPTION.
7. ALL EXISTING UTILITIES SHALL BE USED IN PLACE UNLESS OTHERWISE NOTED. ALL MANHOLE OR VALVE COVER, ETC. ELEVATIONS SHALL BE ADJUSTED AS REQUIRED IF THEY ARE LOCATED WITHIN THE IMPROVEMENT AREA.
8. "PREFORMED FIBER JOINT" SHALL BE IN ACCORDANCE WITH SEC. 1057 FOR PREFORMED FIBER JOINT EXPANSION JOINT FILLER.
9. REINFORCING STEEL TIE BARS SHALL BE IN ACCORDANCE WITH SECTION 706. ALL REINFORCING STEEL SHALL BE EPOXY COATED AND USED AS APPROVED BY THE ENGINEER. WHERE TIE BARS ARE USED, THE CONCRETE SHALL BE 8" THICK (NO DIRECT PAY).
10. CONSTRUCTION AND LENGTH OF EACH CURB RAMP INCLUDING LANDINGS AND TRANSITION AREAS SHALL BE AS SHOWN ON THE PLANS UNLESS DIFFERING FIELD CONDITIONS ARE FOUND OR AS APPROVED BY THE ENGINEER. CURB RAMP CROSS SLOPES SHALL BE 1% PREFFERED (2% MAX.) TOWARD THE STREET. CURB RAMPS ARE TO BE FORMED UP AND HAVE A TRUE AND STRAIGHT LINE.
11. SIDEWALK AND CONCRETE CURB SHALL BE POURED MONOLITHICALLY. THE CONTRACTOR SHALL MATCH EXISTING GROUND SLOPES ADJACENT TO THE CURB RAMPS OR USE AN ALTERNATE METHOD APPROVED BY THE ENGINEER.
12. S-CURB 12"-30" HIGH (MODIFIED S-CURB) WILL REQUIRE #4 REINFORC. BARS ON MAX. 12" CENTERS - SEE DETAIL (NO DIRECT PAY)
13. SODDED SLOPES AT EDGES OF SIDEWALK OR S-CURB SHOULD BE GRADED TO BE 6:1 MIN.

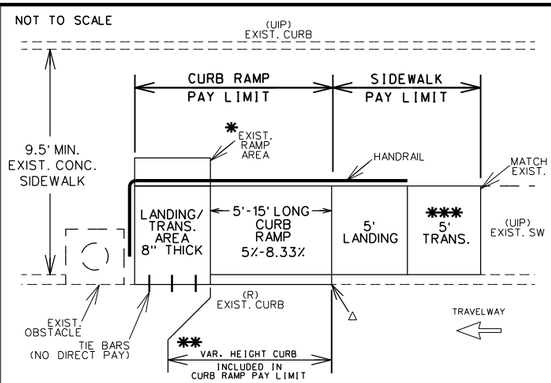
NOT TO SCALE



UTILITIES OR VARIOUS OBSTACLES

NO UTILITY POLES ARE ALLOWED IN THE RAMP LIMITS. BUT ARE PERMITTED IN THE LANDING AREAS AND SIDEWALK WITH A MINIMUM OF 4' CLEARANCE AROUND THE POLE

NOT TO SCALE



△ MATCH EXIST CURB

* FILL IN WHERE EXIST. RAMP WAS. SIZE WILL VARY. (SEE TYPICAL SHEET)

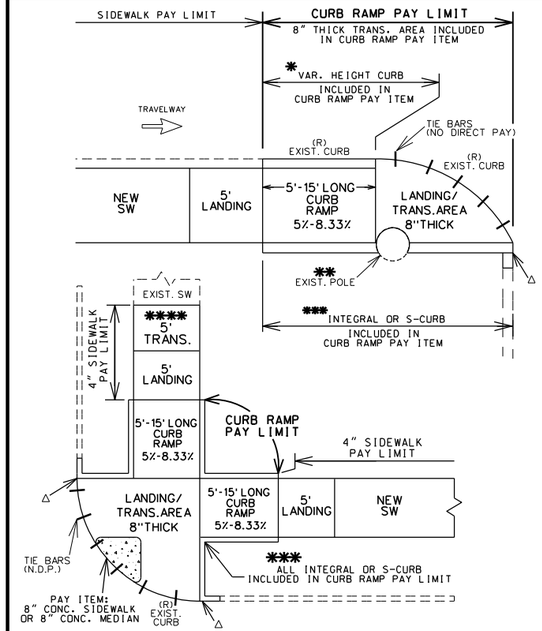
** VAR. HEIGHT CURB ALONG ROADSIDE MAY BE CONSTRUCTED MONOLITHIC OR SEPERATE DEPENDING ON CONST. OPERATIONS.

*** TO BLEND CROSS SLOPE DISCREPENCY

HANDRAIL 2' OFF E.O.P (SEE HANDRAIL STANDARDS)

CURB RAMP - IN EXISTING 9.5'+ WIDE SW

PAY LIMITS



△ MATCH EXIST CURB HEIGHT, OPTIONAL 1' TIE-IN TO EXIST CURB

* VAR. HEIGHT CURB ALONG ROADSIDE MAY BE CONST. MONOLITHIC OR SEP. DEPENDING ON CONST. OPERATIONS.

** NO UTILITY POLES ARE ALLOWED IN THE RAMP LIMITS. BUT ARE PERMITTED IN THE LANDING AND TRANSITION AREAS.

*** TYPE OF CURB WILL DEPEND ON FIELD CONDITIONS.

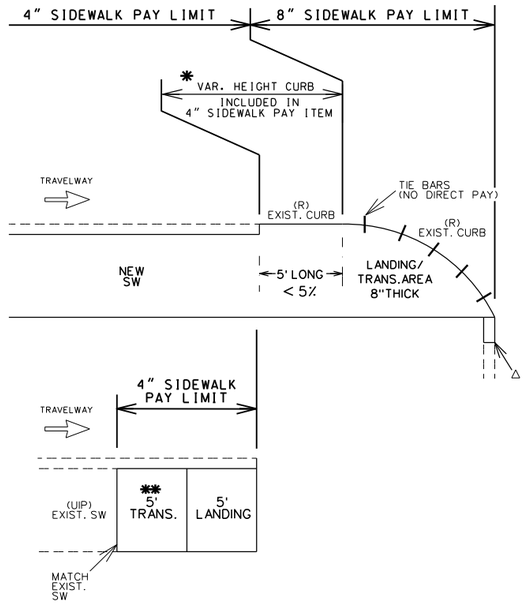
**** TO BLEND CROSS SLOPE DISCREPENCY

CURB RAMP

PAY LIMITS

WHEN RAMP AREA IS LONGER THEN 5' AND BET. 5%-8.33% GRADE, IT IS CONSIDERED A CURB RAMP

NOT TO SCALE



△ MATCH EXIST CURB HEIGHT (1' TAPER FROM SIDEWALK UP TO EXIST CURB HEIGHT)

* VAR. HEIGHT CURB ALONG ROADSIDE MAY BE CONSTRUCTED MONOLITHIC OR SEPERATE DEPENDING ON CONST. OPERATIONS. DOWEL TO EXIST. GUTTER/PAVEMENT (NO DIRECT PAY).

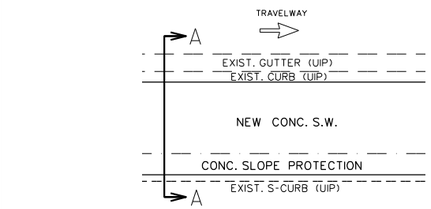
** TO BLEND CROSS SLOPE DISCREPENCY

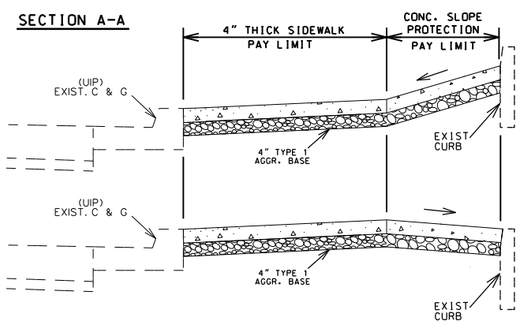
SIDEWALK

PAY LIMITS

WHEN RAMP AREA IS 5'LONG AND LESS THEN 5% GRADE, IT IS CONSIDERED SIDEWALK

NOT TO SCALE

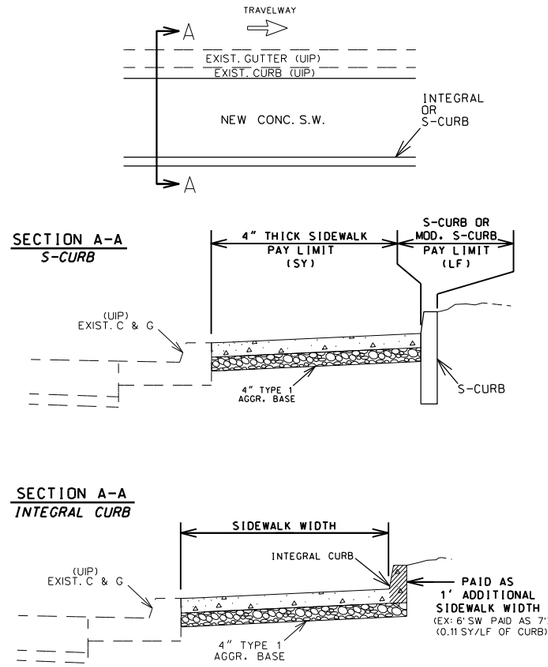




SIDEWALK WITH CONCRETE SLOPE PROTECTION

PAY LIMITS

NOT TO SCALE



SIDEWALK WITH CURB

PAY LIMITS

NOT TO SCALE

PAY ITEM LIMITS, UTILITIES & GENERAL NOTES

TYPICAL SHEET
SHEET 3 OF 9

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	2

COUNTY: JACKSON

JOB NO.: JKU0226

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

REV.	DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
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Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

PERPENDICULAR - TYPE 1

TYPE 1-A

LENGTH (LF) / WIDTH (4F)		8		12			16			REMARKS
		5	6	4	5	6	4	5	6	
TRUNCATED DOMES	SF	-	10.0	12.0	-	10.0	12.0	-	10.0	12.0	
CURB RAMP	SY	-	8.2	9.6	-	10.8	12.7	-	13.5	15.8	
CONC. SIDEWALK	SY	-	5.6	6.4	-	5.6	6.4	-	4.9	6.4	
TYPE 1 AGGREGATE	SY	-	13.8	16.0	-	16.4	19.1	-	18.3	22.2	
ADA LINEAR GRADING	LF	-	22.0	22.0	-	27.5	27.5	-	30.0	30.5	
SODDING	SY	-	5.8	5.7	-	6.8	6.9	-	7.5	7.9	

TYPE 1-B

LENGTH (LF) / WIDTH (4F)		8		12			16			REMARKS
		5	6	4	5	6	4	5	6	
TRUNCATED DOMES	SF	-	22.0	24.0	-	22.0	24.0	-	22.0	24.0	
CURB RAMP	SY	-	10.9	13.1	-	13.6	16.3	-	16.2	19.3	
CONC. SIDEWALK	SY	-	5.6	6.3	-	5.6	6.4	-	4.9	5.7	
TYPE 1 AGGREGATE	SY	-	16.5	19.4	-	19.2	22.7	-	21.1	25.0	
ADA LINEAR GRADING	LF	-	28.0	28.0	-	34.5	34.5	-	38.0	38.0	
SODDING	SY	-	7.4	7.8	-	8.4	8.7	-	9.1	9.5	

TYPE 1-C

LENGTH (LF) / WIDTH (4F)		8		12			16			REMARKS
		5	6	4	5	6	4	5	6	
TRUNCATED DOMES	SF	-	10.0	12.0	-	10.0	12.0	-	10.0	12.0	
CURB RAMP	SY	-	8.8	10.3	-	11.5	13.4	-	14.1	16.5	
CONC. SIDEWALK	SY	-	5.6	6.4	-	5.6	6.4	-	4.9	5.7	
TYPE 1 AGGREGATE	SY	-	14.4	16.7	-	17.1	19.8	-	19.0	22.1	
ADA LINEAR GRADING	LF	-	22.0	22.0	-	26.5	26.5	-	30.0	30.0	
SODDING	SY	-	11.5	11.7	-	13.5	13.5	-	15.0	15.2	

TYPE 1-D

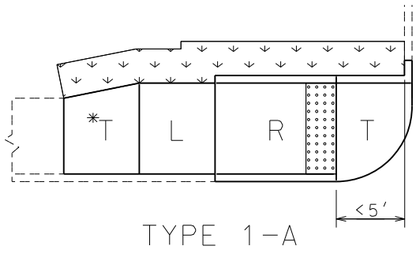
LENGTH (LF) / WIDTH (4F)		8		12			16			REMARKS
		5	6	4	5	6	4	5	6	
TRUNCATED DOMES	SF	-	18.0	24.0	-	18.0	24.0	-	18.0	24.0	
CURB RAMP	SY	-	18.6	22.8	-	24.0	29.0	-	29.3	35.3	
CONC. SIDEWALK	SY	-	11.2	12.8	-	11.2	12.8	-	9.8	11.4	
TYPE 1 AGGREGATE	SY	-	29.8	35.6	-	35.2	41.8	-	39.1	46.7	
ADA LINEAR GRADING	LF	-	42.0	50.0	-	57.0	61.0	-	67.0	72.0	
SODDING	SY	-	11.0	11.3	-	13.0	13.3	-	14.5	14.9	

TYPE 1-E

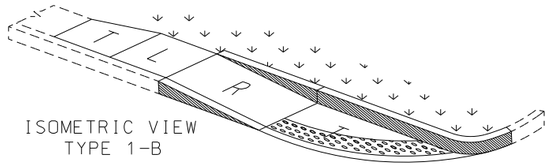
LENGTH (LF) / WIDTH (4F)		8		12			16			REMARKS
		5	6	4	5	6	4	5	6	
TRUNCATED DOMES	SF	-	18.0	24.0	-	18.0	24.0	-	18.0	24.0	
CURB RAMP	SY	-	14.8	19.0	-	20.1	25.2	-	25.5	31.4	
CONC. SIDEWALK	SY	-	11.2	12.8	-	11.2	12.8	-	9.8	11.4	
TYPE 1 AGGREGATE	SY	-	26.0	31.8	-	31.3	38.0	-	35.3	42.8	
ADA LINEAR GRADING	LF	-	43.0	46.0	-	52.0	55.0	-	59.0	62.0	
SODDING	SY	-	13.3	13.6	-	16.0	16.9	-	18.6	19.3	

TYPE 1-F

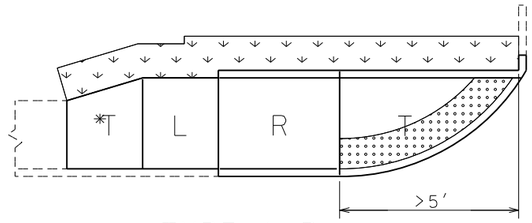
LENGTH (LF) / WIDTH (4F)		8		12			16			REMARKS
		5	6	4	5	6	4	5	6	
TRUNCATED DOMES	SF	-	14.0	16.0	-	14.0	16.0	-	14.0	16.0	
CURB RAMP	SY	-	15.5	19.0	-	20.8	25.2	-	26.2	31.4	
CONC. SIDEWALK	SY	-	11.2	12.8	-	11.2	12.8	-	9.8	11.4	
TYPE 1 AGGREGATE	SY	-	26.7	31.8	-	32.0	38.0	-	36.0	42.8	
ADA LINEAR GRADING	LF	-	43.0	46.0	-	52.0	55.0	-	59.0	62.0	
SODDING	SY	-	18.4	18.8	-	22.4	22.8	-	25.6	25.9	



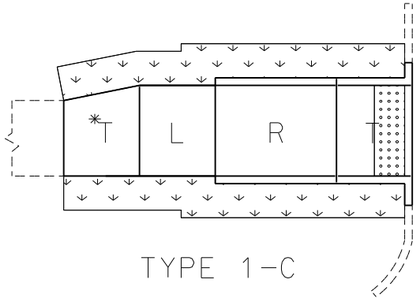
TYPE 1-A



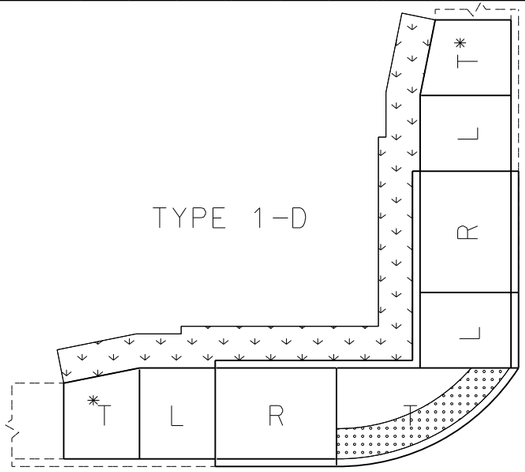
ISOMETRIC VIEW
TYPE 1-B



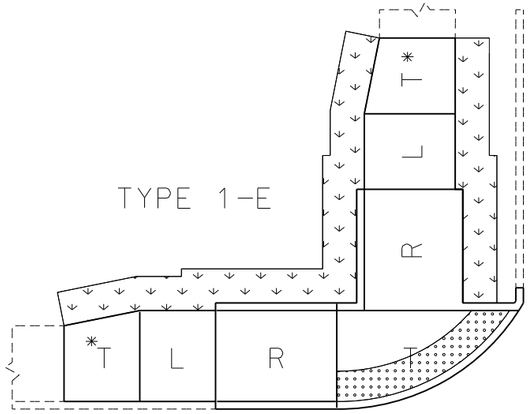
TYPE 1-B



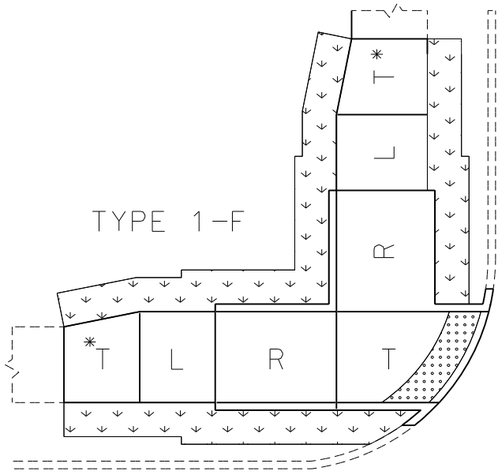
TYPE 1-C



TYPE 1-D



TYPE 1-E



TYPE 1-F

T - IS TO BE 8" THICK AT ALL PAVED APPROACHES AND STREETS. PAID FOR AS CONCRETE CURB RAMP

T - TRANSITION TO EXISTING SW OR PAVED APPROACH (LANDING PREFERED AT PAVED APPROACH IF CONDITIONS ALLOW)

*T - IS STILL NEEDED EVEN IF THE EXISTING SIDEWALK IS THE SAME WIDTH AS THE NEW SIDEWALK.(IT WILL BLEND THE EXIST XSLOPE INTO THE NEW LANDING XSLOPE)

L - LANDING

R - RAMP

- CURB RAMP PAY LIMITS

- SOD SLOPE 6:1 MIN.

- TRUNCATED DOME LOCATION IF DIST. IS <5' OR >5'

TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING YIELD / STOP SIGNS OR SIGNALS

NOTE:
QUANTITIES ARE CALCULATED BY AREA AND MAY NOT MATCH EXACT FIELD CONDITIONS.

REVISED: 02-22-2017

RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER
STATE OF MISSOURI

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	2

COUNTY: JACKSON

JOB NO.: JKU0226

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

TYPE 1

PERPENDICULAR CURB RAMPS

TYPICAL SHEET 4 OF 9

REV.

PARRALLEL - TYPE 2

TYPE 2-A

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	10.0	10.0	-	10.0	10.0	-	10.0	10.0	
CURB RAMP SY	-	9.1	10.6	-	11.8	13.7	-	14.4	16.8	
CONC. SIDEWALK SY	-	5.6	6.4	-	4.9	5.7	-	4.9	5.7	
TYPE 1 AGGREGATE SY	-	14.7	17.0	-	16.7	19.4	-	19.3	22.5	
ADA LINEAR GRADING LF	-	26.0	26.0	-	29.0	29.0	-	33.0	33.0	
SODDING SY	-	8.0	8.3	-	8.6	8.8	-	9.6	9.8	

TYPE 2-B

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	10.0	10.0	-	10.0	10.0	-	10.0	10.0	
CURB RAMP SY	-	11.8	13.3	-	14.5	16.4	-	17.2	19.5	
CONC. SIDEWALK SY	-	5.6	6.4	-	4.9	5.7	-	4.9	5.7	
TYPE 1 AGGREGATE SY	-	17.4	19.7	-	19.4	22.1	-	22.1	25.2	
ADA LINEAR GRADING LF	-	26.0	26.0	-	29.0	29.0	-	33.0	33.0	
SODDING SY	-	13.8	14.1	-	15.1	15.5	-	17.1	17.5	

TYPE 2-C

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	10.0	10.0	-	10.0	10.0	-	10.0	10.0	
CURB RAMP SY	-	16.4	18.7	-	21.7	24.9	-	27.0	31.2	
CONC. SIDEWALK SY	-	11.2	12.8	-	9.8	11.4	-	9.8	11.4	
TYPE 1 AGGREGATE SY	-	27.6	31.5	-	31.5	36.3	-	36.8	42.6	
ADA LINEAR GRADING LF	-	41.0	41.0	-	47.0	47.0	-	55.0	55.0	
SODDING SY	-	12.3	12.5	-	13.6	13.9	-	15.6	15.9	

TYPE 2-D

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	10.0	10.0	-	10.0	10.0	-	10.0	10.0	
CURB RAMP SY	-	16.8	19.2	-	22.2	25.4	-	27.5	31.6	
CONC. SIDEWALK SY	-	11.2	12.8	-	9.8	11.4	-	9.8	11.4	
TYPE 1 AGGREGATE SY	-	28.0	32.0	-	32.0	36.8	-	37.3	43.0	
ADA LINEAR GRADING LF	-	41.0	41.0	-	47.0	47.0	-	55.0	55.0	
SODDING SY	-	20.2	20.3	-	22.4	23.2	-	26.4	27.2	

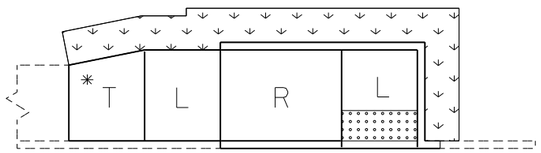
TYPE 2-E

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	10.0	10.0	-	10.0	10.0	-	10.0	10.0	
CURB RAMP SY	-	10.8	11.5	-	13.2	14.4	-	15.7	17.3	
CONC. SIDEWALK SY	-	5.6	6.7	-	5.0	6.0	-	5.0	6.0	
TYPE 1 AGGREGATE SY	-	16.4	18.2	-	18.2	20.4	-	20.7	23.3	
ADA LINEAR GRADING LF	-	22.5	22.5	-	26.5	26.5	-	30.5	30.5	
SODDING SY	-	-	-	-	-	-	-	-	-	
HANDRAIL LF	-	-	-	-	-	-	-	-	-	SEE STANDARDS FOR LENGTH

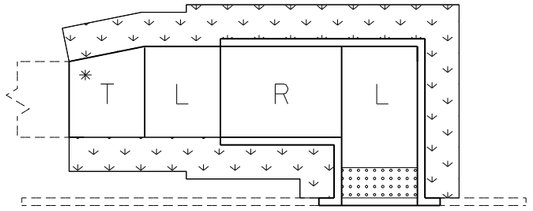
TYPE 2-F

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	10.0	10.0	-	10.0	10.0	-	10.0	10.0	
CURB RAMP SY	-	15.5	17.1	-	20.4	23.1	-	25.5	28.9	
CONC. SIDEWALK SY	-	11.2	13.4	-	10.0	12.0	-	10.0	12.0	
TYPE 1 AGGREGATE SY	-	26.7	30.5	-	30.4	35.1	-	35.5	40.9	
ADA LINEAR GRADING LF	-	39.0	39.0	-	47.0	47.0	-	55.0	55.0	
SODDING SY	-	-	-	-	-	-	-	-	-	
HANDRAIL LF	-	-	-	-	-	-	-	-	-	SEE STANDARDS FOR LENGTH

NOTE:
QUANTITIES ARE CALCULATED BY AREA AND MAY NOT MATCH EXACT FIELD CONDITIONS.



TYPE 2-A



TYPE 2-B

** 3.5' LANDING EXTENSION REQ'D. FOR INSTALLATION OF FUTURE OR NEW PED. PUSH BUTTON

NOTE: SEE STANDARDS FOR ALL PED. PUSH BUTTON LOCATIONS

- TRUNCATED DOMES

TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING YIELD / STOP SIGNS OR SIGNALS

T - TRANSITION TO EXISTING SW

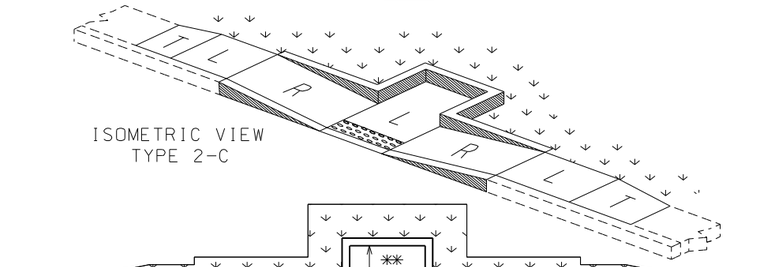
* - T IS STILL NEEDED EVEN IF THE EXISTING SIDEWALK IS THE SAME WIDTH AS THE NEW SIDEWALK. (IT WILL BLEND THE EXIST XSLOPE INTO THE NEW LANDING XSLOPE)

L - LANDING

R - RAMP

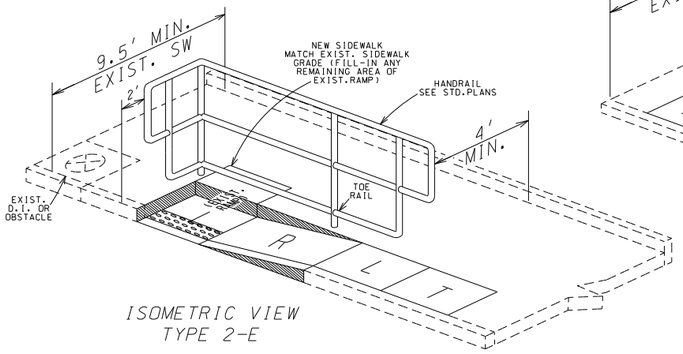
- SOD SLOPE 6:1 MIN.

- CURB RAMP PAY LIMITS

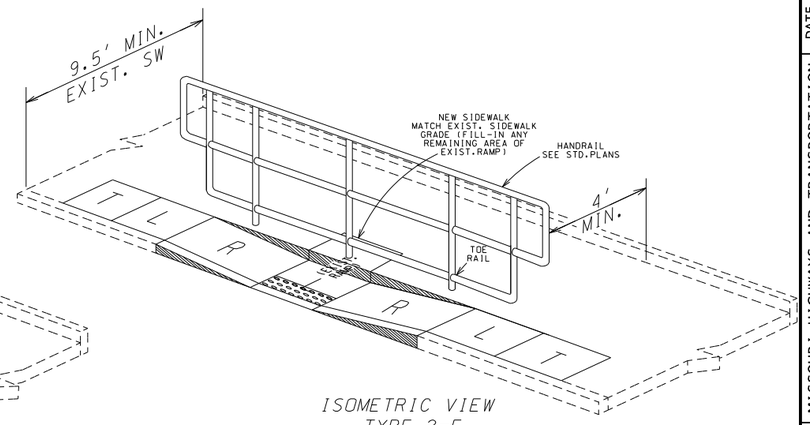


ISOMETRIC VIEW
TYPE 2-C

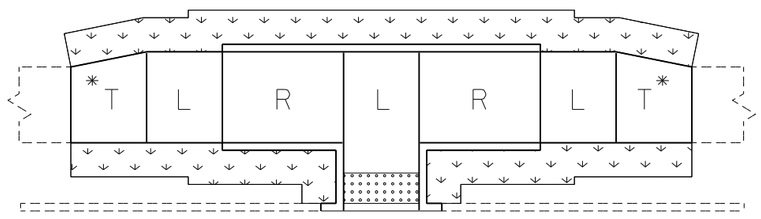
TYPE 2-C



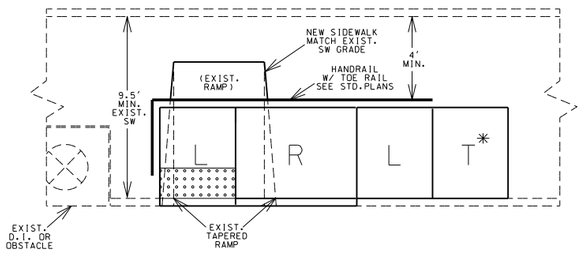
ISOMETRIC VIEW
TYPE 2-E



ISOMETRIC VIEW
TYPE 2-F



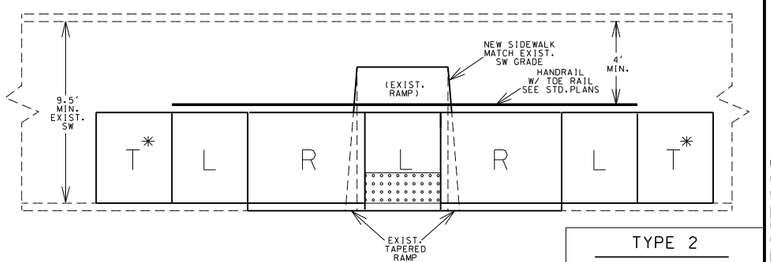
TYPE 2-D



TYPE 2-E

USE ONLY WHEN TYPE 2-F IS UNABLE TO BE CONSTRUCTED DUE TO AN EXIST. D.I. OR OTHER OBSTACLE

SEE STANDARDS FOR HANDRAIL SPECS



TYPE 2-F

SEE STANDARDS FOR HANDRAIL SPECS

TYPE 2
PARALLEL CURB RAMPS

TYPICAL SHEET
SHEET 5 OF 9

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	2

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION	DATE	REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certifcate of Authority
No.: 000165

PARRALLEL - TYPE 2 (cont'd.)

TYPE 2-G

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	12.0	12.0	-	10.0	10.0	-	10.0	10.0	
CURB RAMP SY	-	15.7	18.0	-	20.8	23.7	-	25.8	30.2	
CONC. SIDEWALK SY	-	21.4	25.0	-	17.6	20.3	-	15.2	17.5	
TYPE 1 AGGREGATE SY	-	37.1	43.0	-	38.4	44.0	-	41.0	47.7	
ADA LINEAR GRADING LF	-	52.0	52.0	-	54.0	54.0	-	58.0	58.0	
SODDING SY	-	13.6	13.6	-	13.7	13.5	-	14.5	14.9	

TYPE 2-H

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	12.0	12.0	-	10.0	10.0	-	10.0	10.0	
CURB RAMP SY	-	15.7	18.0	-	21.0	24.5	-	26.9	31.4	
CONC. SIDEWALK SY	-	13.2	16.0	-	12.0	14.2	-	12.0	14.4	
TYPE 1 AGGREGATE SY	-	28.9	34.0	-	33.0	38.6	-	38.9	45.8	
ADA LINEAR GRADING LF	-	42.0	42.0	-	49.0	49.0	-	55.0	55.0	
SODDING SY	-	11.1	11.2	-	12.5	12.5	-	14.5	14.9	

T* - IS STILL NEEDED EVEN IF THE EXISTING SIDEWALK IS THE SAME WIDTH AS THE NEW SIDEWALK.(IT WILL BLEND THE EXIST XSLOPE INTO THE NEW LANDING XSLOPE)

T - TRANSITION TO EXISTING SW

L - LANDING

R - RAMP

- SOD SLOPE 6:1 MIN.

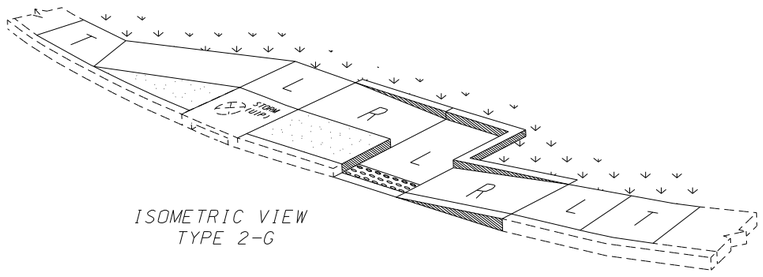
- TRUNCATED DOME LOCATION, IF DIST. IS <5' OR > 5'

TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING YIELD / STOP SIGNS OR SIGNALS

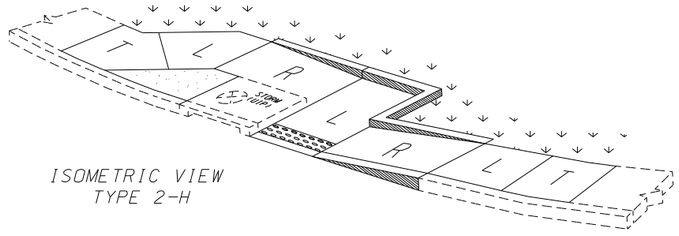
- CURB RAMP PAY LIMITS

- INCLUDED IN 4" CONC. SIDEWALK PAY LIMIT

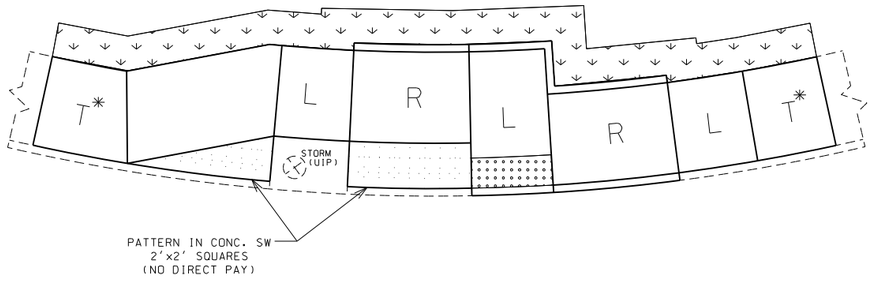
NOTE:
QUANTITIES ARE CALCULATED BY AREA AND MAY NOT MATCH EXACT FIELD CONDITIONS.



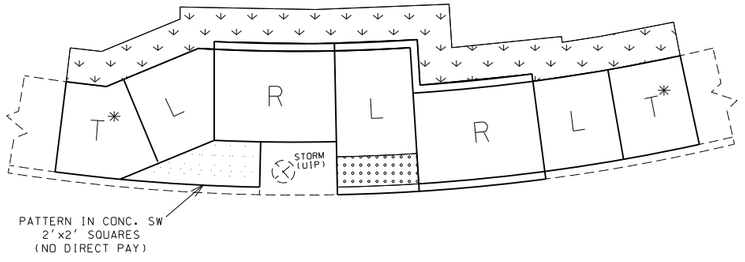
ISOMETRIC VIEW
TYPE 2-G



ISOMETRIC VIEW
TYPE 2-H



TYPE 2-G



TYPE 2-H

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
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COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

TYPE 2
PARALLEL
CURB RAMPS

TYPICAL SHEET
SHEET 6 OF 9

REV.

DIAGONAL - TYPE 3

TYPE 3-A

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	24.0	28.0	-	20.6	25.0	-	20.6	25.0	
CURB RAMP SY	-	24.4	27.0	-	26.9	31.2	-	32.2	37.4	
CONC. SIDEWALK SY	-	11.2	12.8	-	9.8	11.4	-	9.8	11.4	
TYPE 1 AGGREGATE SY	-	35.6	39.8	-	36.7	42.6	-	42.0	48.8	
ADA LINEAR GRADING LF	-	51.0	51.0	-	59.0	59.0	-	67.0	67.0	
SODDING SY	-	11.6	11.4	-	12.9	12.9	-	14.9	14.9	
8"SW OR MED STRIP SY	-	3.0	2.2	-	3.0	2.2	-	3.0	2.2	

TYPE 3-B

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	24.0	28.0	-	20.6	25.0	-	20.6	25.0	
CURB RAMP SY	-	22.0	26.3	-	25.9	31.2	-	31.2	37.4	
CONC. SIDEWALK SY	-	11.2	12.8	-	9.8	11.4	-	9.8	11.4	
TYPE 1 AGGREGATE SY	-	33.2	39.1	-	35.7	42.6	-	41.0	48.8	
ADA LINEAR GRADING LF	-	51.0	51.0	-	59.0	59.0	-	67.0	67.0	
SODDING SY	-	15.2	15.3	-	17.1	17.5	-	20.1	20.5	
8"SW OR MED STRIP SY	-	1.5	1.5	-	1.5	1.5	-	1.5	1.5	

TYPE 3-C

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	20.0	24.0	-	20.0	24.0	-	20.0	24.0	
CURB RAMP SY	-	20.7	26.8	-	25.1	31.5	-	30.4	37.7	
CONC. SIDEWALK SY	-	11.2	12.8	-	9.8	11.4	-	9.8	11.4	
TYPE 1 AGGREGATE SY	-	31.9	39.6	-	34.9	42.9	-	40.2	49.1	
ADA LINEAR GRADING LF	-	51.0	51.0	-	58.0	58.0	-	67.0	67.0	
SODDING SY	-	18.8	19.3	-	21.3	22.1	-	25.3	26.1	
8"SW OR MED STRIP SY	-	1.0	1.6	-	1.0	1.6	-	1.0	1.6	

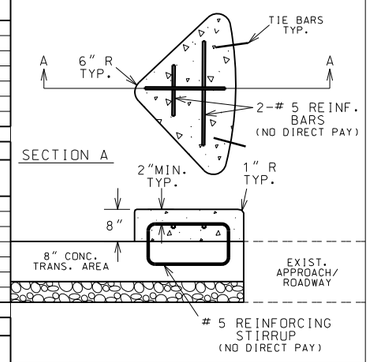
TYPE 3-D

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	24.0	28.0	-	22.4	26.5	-	22.4	26.5	
CURB RAMP SY	-	15.9	19.1	-	17.7	21.4	-	20.4	24.5	
CONC. SIDEWALK SY	-	5.6	6.4	-	4.9	5.7	-	4.9	5.7	
TYPE 1 AGGREGATE SY	-	21.5	25.5	-	22.6	27.1	-	25.3	30.2	
ADA LINEAR GRADING LF	-	31.0	31.0	-	34.0	34.0	-	38.0	38.0	
SODDING SY	-	12.6	12.9	-	13.5	14.0	-	15.5	16.0	
8"SW OR MED STRIP SY	-	1.0	0.8	-	1.0	0.8	-	1.0	0.8	

TYPE 3-E

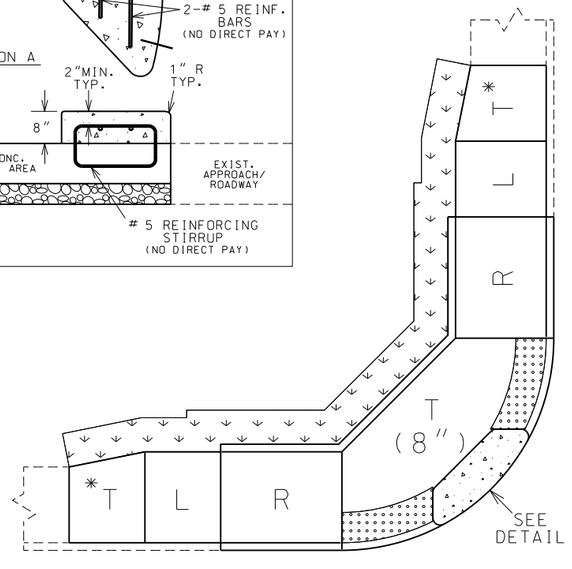
LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	20.0	24.0	-	20.0	24.0	-	20.0	24.0	
CURB RAMP SY	-	17.2	19.8	-	17.7	21.4	-	20.4	24.5	
CONC. SIDEWALK SY	-	8.4	10.7	-	7.3	9.4	-	7.3	9.4	
TYPE 1 AGGREGATE SY	-	25.6	30.5	-	25.0	30.8	-	27.7	33.9	
ADA LINEAR GRADING LF	-	30.0	30.0	-	35.5	35.5	-	39.5	39.5	
SODDING SY	-	12.4	12.4	-	12.9	13.3	-	14.9	15.3	
8"SW OR MED STRIP SY	-	1.6	1.6	-	1.6	1.6	-	1.6	1.6	

- DETAIL - 8" SIDEWALK OR 8" MEDIAN STRIP



T - IS TO BE 8" THICK AT ALL PAVED APPROACHES AND STREETS. PAID FOR AS CONCRETE CURB RAMP

NOTE:
QUANTITIES ARE CALCULATED BY AREA AND MAY NOT MATCH EXACT FIELD CONDITIONS.



TYPE 3-A

T - TRANSITION TO EXISTING SW OR PAVED APPROACH (LANDING PREFERED IF CONDITIONS ALLOW)

T* - IS STILL NEEDED EVEN IF THE EXISTING SIDEWALK IS THE SAME WIDTH AS THE NEW SIDEWALK.(IT WILL BLEND THE EXIST XSLOPE WITH THE NEW LANDING XSLOPE)

L - LANDING

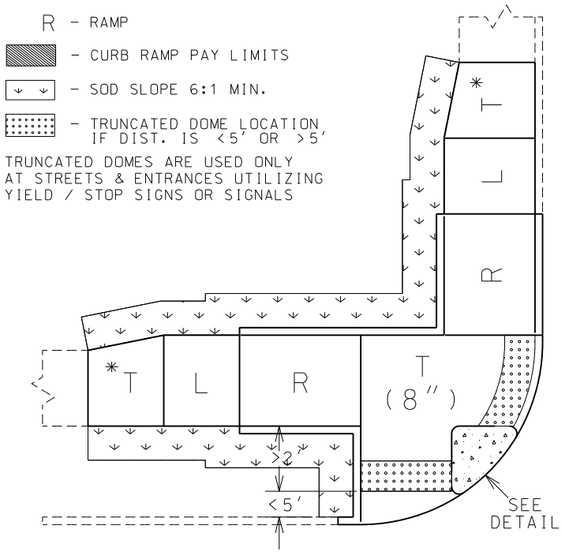
R - RAMP

- CURB RAMP PAY LIMITS

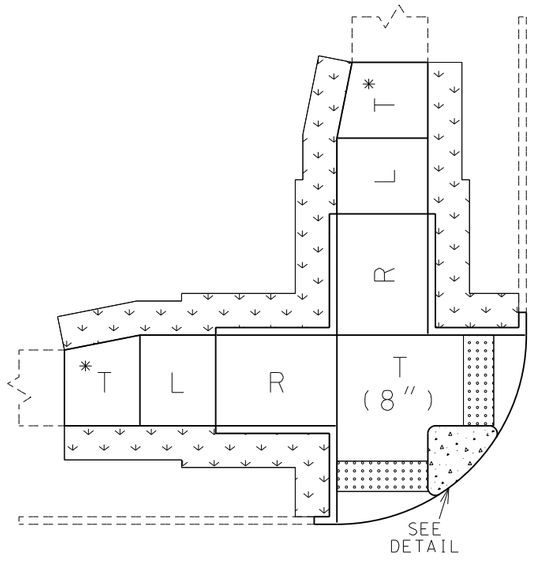
- SOD SLOPE 6:1 MIN.

- TRUNCATED DOME LOCATION IF DIST. IS <5' OR >5'

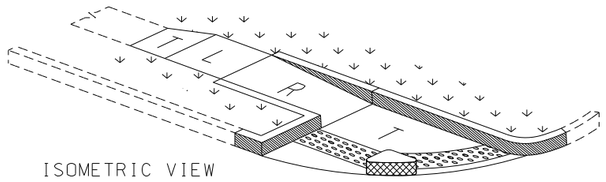
TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING YIELD / STOP SIGNS OR SIGNALS



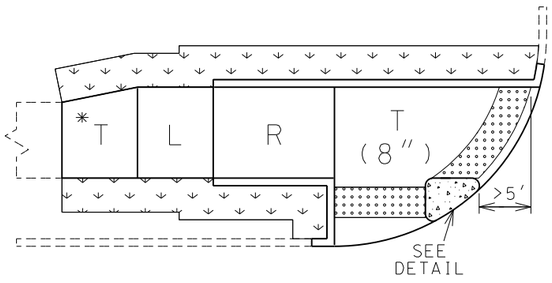
TYPE 3-B



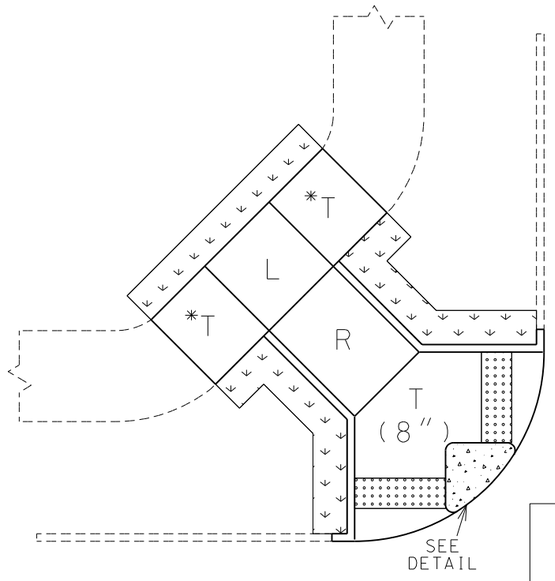
TYPE 3-C



ISOMETRIC VIEW
TYPE 3-D



TYPE 3-D



TYPE 3-E

TYPE 3
DIAGONAL CURB RAMPS

TYPICAL SHEET
SHEET 7 OF 9

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	2

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

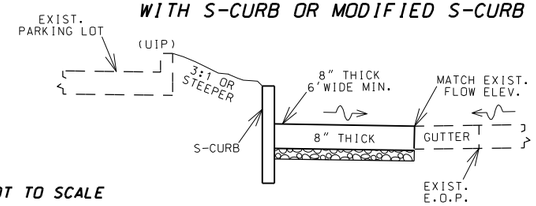
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certifcate of Authority
No.: 000165

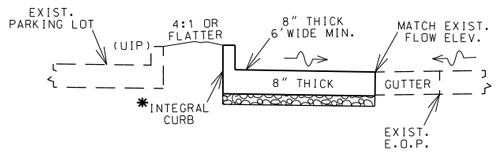
NOTES FOR MODIFIED SIDEWALK:

1. REMOVE EXIST. CURB & RAISED ISLAND WITHIN LIMITS SHOWN.
2. AREA INSIDE FINAL CURB TO BE REPAIRED OR REPLACED WITH EXISTING SURFACE MATERIAL. GRADE TO DRAIN.
3. CONSTRUCT 8" THICK CONC. SIDEWALK FLUSH WITH EXIST. CONC. PAVED APPROACH.
4. CONSTRUCT CURB ADJACENT TO MODIFIED SIDEWALK.
5. MODIFIED SIDEWALK PAID FOR AS 8" SIDEWALK.
6. 6' MINIMUM WIDTH.
7. NO DIRECT PAY FOR SAW CUTS AND TIE BARS (ON 12" CENTERS MAX.)
8. TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING STOP SIGNS OR SIGNALS.
9. X-SLOPE 1% PREFERRED (2% MAX.)
10. USE S-CURB IF CONSTRUCTING CURB ON R/W LINE.

SECTION A-A
WITH S-CURB OR MODIFIED S-CURB



SECTION A-A
WITH INTEGRAL CURB

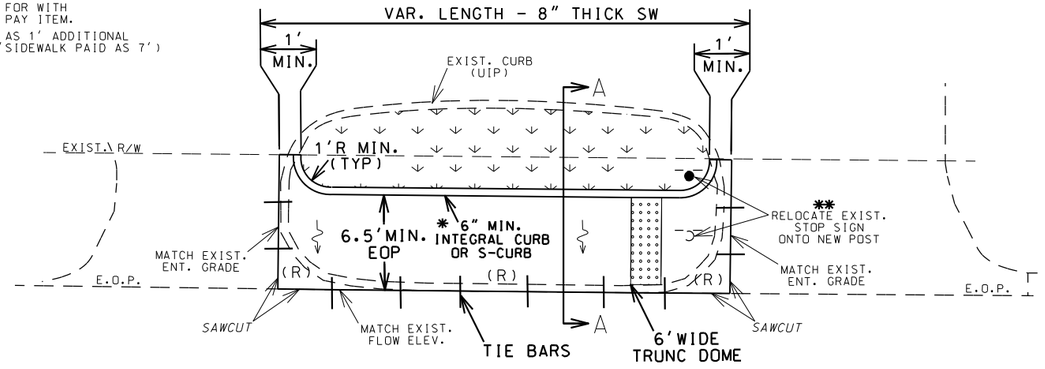


NOT TO SCALE

✱ INTEGRAL CURB IS PAID FOR WITH THE 8" CONC. SIDEWALK PAY ITEM.
INTEGRAL CURB IS PAID AS 1' ADDITIONAL SIDEWALK WIDTH (EX. 6'SIDEWALK PAID AS 7')
(0.11 SY/LF OF CURB)

TYPICAL
MODIFIED SIDEWALK
8" THICK

✱✱ TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING STOP/YIELD SIGNS OR SIGNALS.

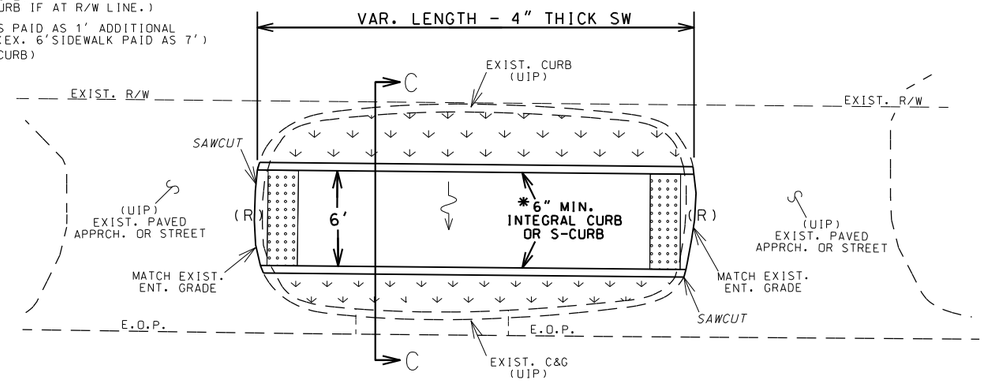


NOTES FOR CUT-THRU SIDEWALK:

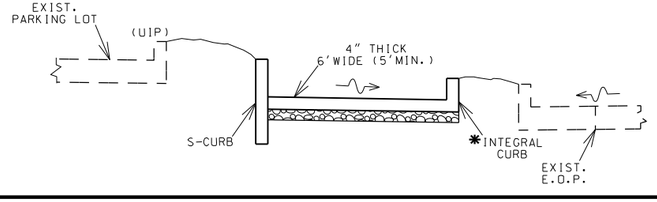
1. REMOVE EXIST. CURB & RAISED ISLAND WITHIN LIMITS SHOWN.
2. AREA INSIDE FINAL CURB TO BE REPAIRED OR REPLACED WITH EXISTING SURFACE MATERIAL. GRADE TO DRAIN.
3. CONSTRUCT 4" THICK CONC. SIDEWALK FLUSH WITH EXIST. CONC. PAVED APPROACH.
4. CONSTRUCT CURB ON BOTH SIDES ADJACENT TO SIDEWALK.
5. CUT-THRU SIDEWALK PAID FOR AS 4" SIDEWALK.
6. 6' PREFERRED WIDTH (5' MIN.)
7. SAW CUTS (NO DIRECT PAY).
8. TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING STOP SIGNS OR SIGNALS.
9. X-SLOPE 1% PREFERRED (2% MAX.)
10. USE S-CURB IF CONSTRUCTING CURB ON R/W LINE.

✱ INTEGRAL CURB IS PAID FOR AS 4" CONC. SIDEWALK PAY ITEM. S-CURB IS PAID FOR AS ITS OWN PAY ITEM.
(ALWAYS USE S-CURB IF AT R/W LINE.)
INTEGRAL CURB IS PAID AS 1' ADDITIONAL SIDEWALK WIDTH (EX. 6'SIDEWALK PAID AS 7')
(0.11 SY/LF OF CURB)

TYPICAL
CUT-THRU SIDEWALK

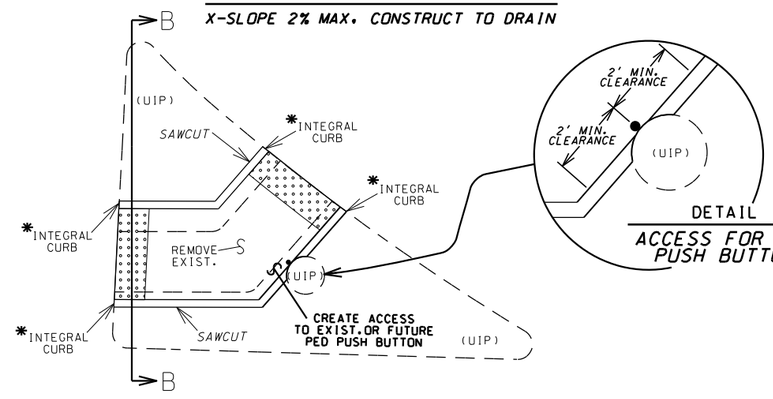


SECTION C-C
WITH S-CURB OR INTEGRAL



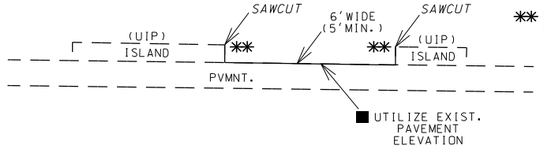
NOT TO SCALE

TYPICAL
ISLAND CUT-THRU SIDEWALK
X-SLOPE 2% MAX. CONSTRUCT TO DRAIN



DETAIL
ACCESS FOR PED PUSH BUTTON

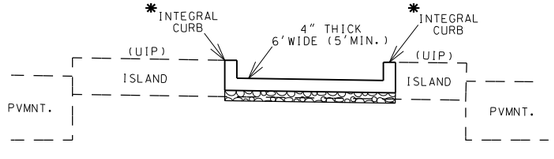
SECTION B-B
ISLAND CUT-THRU SIDEWALK
FOR EXISTING 'PINNED-ON' ISLAND



■ SMALL QTY. HAS BEEN INCLUDED FOR 8" THICK SIDEWALK TO ADDRESS ANY UNFORSEEN PVMNT. REPAIRS OR DIFFERENCES IN ELEVATION. (UNDERRUN IF FIELD CONDITIONS DO NOT WARRANT)

✱✱ NO INTEGRAL CURB, AGGR. OR LIN. GRADING REQUIRED IF THE ISLAND IS 'PINNED-ON'

SECTION B-B
ISLAND CUT-THRU SIDEWALK



✱ INTEGRAL CURB IS PAID FOR WITH THE 4" CONC. SIDEWALK PAY ITEM.
INTEGRAL CURB IS PAID AS 1' ADDITIONAL SIDEWALK WIDTH (EX. 6'SIDEWALK PAID AS 7')
(0.11 SY/LF OF CURB)

MODIFIED SIDEWALK
AND
SIDEWALK CUT-THRU's

TYPICAL SHEET
SHEET 8 OF 9

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	2

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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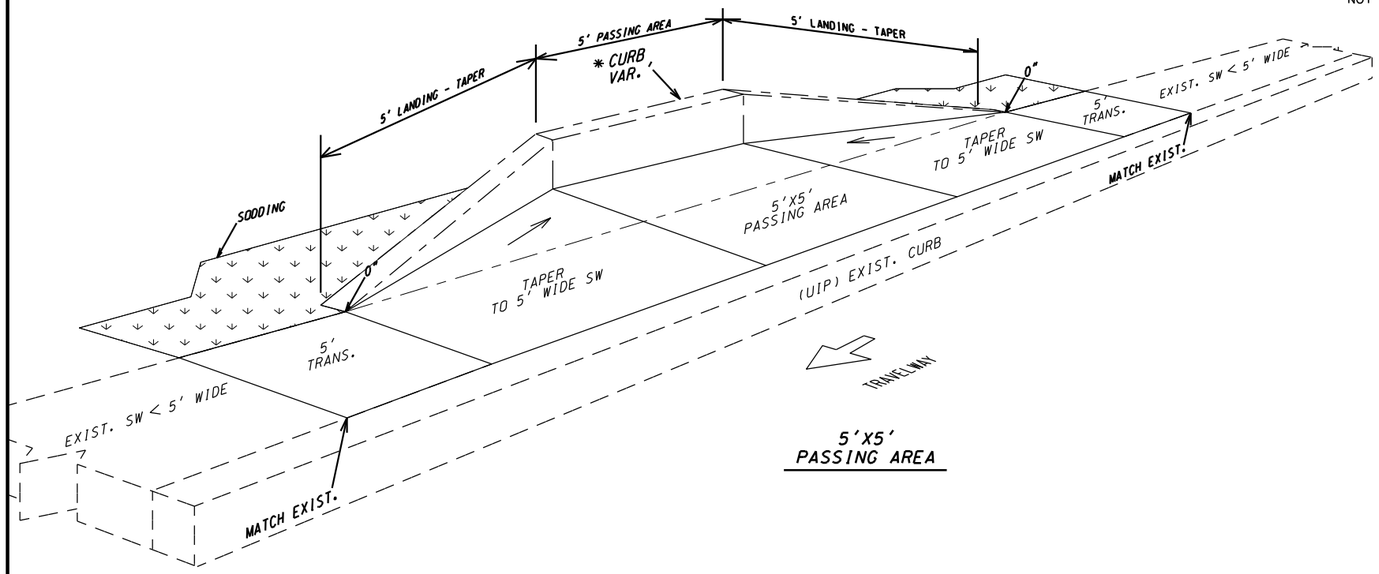
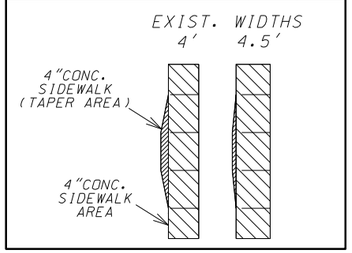
NOT TO SCALE



5'X5' PASSING AREA

QUANTITIES FOR PASSING AREAS				
EXISTING SW WIDTH			4'	4.5'
4" CONC. SIDEWALK (TAPER)		SY	1.3	0.7
TYPE 1 AGGREGATE		SY	1.3	0.7
4" CONC. SIDEWALK		SY	10.4	11.7
TYPE 1 AGGREGATE		SY	10.4	11.7
INTEGRAL CURB	**	SY	2.0	2.0
TYPE 1 AGGREGATE		SY	1.0	1.0
S-CURB		LF	17.2	16.0
MODIFIFED S-CURB		LF	17.2	16.0
SODDING		SY	53.0	53.0
LINEAR GRADING		LF	25.0	25.0



NOTES:

1. PASSING AREA REQUIRED EVERY 200' ON SIDEWALK THAT IS LESS THAN 5' WIDE.
* 2. CURB MAY OR MAY NOT BE NEEDED DEPENDING ON FIELD CONDITIONS. IF CURB IS NEEDED, THE CURB HEIGHT WILL VARY DEPENDING ON FIELD CONDITIONS. (INTEGRAL CURB, S-CURB OR MOD. S-CURB).
3. S-CURB OVER 12" TALL IS PAID FOR AS 'MODIFIED S-CURB' AND REQUIRES REINFORCEMENT (NO DIRECT PAY). SEE DETAIL THIS SHEET.
** 4. INTEGRAL CURB IS PAID FOR IN THE 4" CONC. SIDEWALK PAY ITEM. PAID AS 1' ADDITIONAL SIDEWALK WIDTH. (EX. 6' SW PAID AS 7') (0.11 SY/LF OF CURB)

PASSING AREAS,
BUS STOPS,
MODIFIED S-CURB, AND
SIDEWALK REINFORCEMENT

TYPICAL SHEET
SHEET 9 OF 9

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	2

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REMOVAL OF IMPROVEMENTS					
SHEET NO.	STA.	STA.	ALIGNMENT	LOCATION	DESCRIPTION
34-35	12+18.24	21+05.47	HWY 24	LT	1449 SY PAVEMENT
34-35	12+18.24	21+27.17	HWY 24	LT	SAWCUT 934 LF
34	12+20.81	12+91.52	HWY 24	LT	77 LF CURB
34	12+56.00		HWY 24	LT & RT	2 SY ISLAND & 14 LF CURB
34	12+48.82	12+74.01	HWY 24	LT	SAWCUT 35 LF
34	12+56.44	12+81.18	HWY 24	LT	SAWCUT 35 LF
34	12+87.47		HWY 24	LT	TREE
34	12+29.17	12+64.73	HWY 24	RT	SAWCUT 38 LF
34	12+34.68	12+65.24	HWY 24	RT	SAWCUT 31 LF
34	12+31.49	12+70.87	HWY 24	RT	40 LF 15" VCP
34	12+71.00		HWY 24	RT	INLET & 8 LF 12" RCP
34	12+70.00	12+72.00	HWY 24	RT	9 LF CURB
34	12+71.00	12+92.26	HWY 24	RT	44 LF CURB
34	12+76.22	12+79.55	HWY 24	RT	STAIRS
34	12+76.00		HWY 24	RT	CONCRETE & WALL
34	12+82.10		HWY 24	RT	TREE
34	12+25.10	13+25.40	HWY 24	LT	89 SY SIDEWALK
34	12+65.00	15+81.50	HWY 24	RT	SAWCUT 373 LF
34	12+81.19	15+81.37	HWY 24	RT	443 SY PAVEMENT
34	12+70.47	15+76.55	HWY 24	RT	340 SY SIDEWALK
34	12+72.99		HWY 24	RT	INLET & 15 LF 12" RCP
34	12+78.42	12+90.27	HWY 24	RT	17 SY SIDEWALK
34	13+43.07	14+57.12	HWY 24	LT	200 SY SIDEWALK
34	13+84.65		HWY 24	LT	TREE
34	14+43.63	14+49.50	HWY 24	RT	BOLLARDS
34	14+43.49	14+52.13	HWY 24	LT	SIGNAL EQUIPMENT
34	14+48.99	14+57.95	HWY 24	RT	SIGNAL EQUIPMENT
34	14+56.56	14+97.09	HWY 24	LT	640 SY PAVEMENT
34	14+92.90	15+74.32	HWY 24	LT & RT	ISLAND & CURB
34	15+54.21		HWY 24	LT	SIGNAL EQUIPMENT
34-35	15+64.60	16+26.11	HWY 24	LT	68 SY SIDEWALK
34	14+99.93	15+02.30	HWY 24	LT	SIGNAL EQUIPMENT
34	15+95.33		HWY 24	LT	BOLLARDS WITHIN EXIST R/W
34	15+08.62	15+12.44	HWY 24	RT	SIGNAL EQUIPMENT
34	15+76.47		HWY 24	RT	16 LF CURB
34	16+02.22	16+17.58	HWY 24	LT	SIGNAL EQUIPMENT
34	16+27.50		HWY 24	RT	SIGNAL EQUIPMENT
34-35	16+05.21	18+83.02	HWY 24	RT	SAWCUT 309 LF
34	16+05.73		HWY 24	LT	BUILDING
34	16+06.03	16+10.52	HWY 24	LT	FLAGPOLES
34-35	16+24.23	17+95.95	HWY 24	LT	260 LF CURB
35	17+44.70		HWY 24	LT	TREE & CURB
34-35	16+10.64	17+85.59	HWY 24	LT & RT	ISLAND & CURB
34-35	16+05.21	18+83.69	HWY 24	RT	426 SY PAVEMENT
34-35	16+09.54	18+80.11	HWY 24	RT	262 SY SIDEWALK
35	18+62.76		HWY 24	RT	VEGETATION
35	18+23.03	18+73.84	HWY 24	LT & RT	ISLAND & CURB
35	17+88.07	18+22.23	HWY 24	LT	348 SY PAVEMENT
35	18+21.00	19+34.09	HWY 24	LT	158 LF CURB
35	18+30.09		HWY 24	LT	POLE
35	18+29.21	21+03.59	HWY 24	LT	FENCE WITHIN EXIST R/W
35	18+69.02	19+47.14	HWY 24	LT	POLES
35	18+22.72	19+49.57	HWY 24	LT	63 SY SIDEWALK

REMOVAL OF IMPROVEMENTS					
SHEET NO.	STA.	STA.	ALIGNMENT	LOCATION	DESCRIPTION
35	18+67.44	19+08.76	HWY 24	RT	SAWCUT 41 LF
35	18+74.55	19+08.73	HWY 24	RT	SAWCUT 34 LF
35	19+08.00		HWY 24	RT	11 LF CURB
35	19+08.44	19+22.52	HWY 24	RT	78 SY SIDEWALK
35	19+03.17	20+49.09	HWY 24	RT	277 SY PAVEMENT
35	19+10.37	19+73.06	HWY 24	LT & RT	ISLAND & CURB
35	19+03.47	20+49.09	HWY 24	RT	SAWCUT 203 LF
35	19+85.22		HWY 24	RT	TREE
35	19+34.12	19+90.96	HWY 24	LT & RT	66 SY PAVEMENT
35	19+77.59	21+21.48	HWY 24	LT & RT	158 LF CURB
35	20+30.62	21+07.40	HWY 24	LT & RT	ISLAND & CURB
35	20+50.12		HWY 24	LT & RT	SAWCUT 79 LF
35	20+58.79		HWY 24	LT & RT	SAWCUT 81 LF
35	19+76.56	21+18.90	HWY 24	LT	70 SY SIDEWALK
35	21+20.97	21+27.17	HWY 24	LT	6 SY PAVEMENT
35	20+73.65	21+23.35	HWY 24	RT	119 LF CURB
35-36	20+68.00	23+09.59	HWY 24	RT	147 SY PAVEMENT
35-36	20+68.00	23+09.59	HWY 24	RT	SAWCUT 287 LF
35	21+22.87	22+27.53	HWY 24	RT	161 SY PAVEMENT
35	20+73.52	21+36.00	HWY 24	RT	44 SY SIDEWALK
35	22+14.39	22+44.69	HWY 24	RT	15 SY SIDEWALK
35	21+11.34	21+59.74	HWY 24	LT	SAWCUT 48 LF
35	21+18.16	12+52.73	HWY 24	LT	SAWCUT 35 LF
35	21+45.31	21+48.33	HWY 24	LT	3 SY PAVEMENT
35	21+49.43	22+28.86	HWY 24	LT	103 LF CURB
35	21+50.98	22+30.13	HWY 24	LT	39 SY SIDEWALK
35-36	21+45.31	24+41.88	HWY 24	LT	SAWCUT 335 LF
35-36	21+50.22	22+64.46	HWY 24	LT & RT	ISLAND & CURB
35-36	22+14.72	22+73.95	HWY 24	LT	73 SY PAVEMENT
35	22+24.26	22+45.82	HWY 24	RT	84 LF CURB
36	22+80.52	23+07.67	HWY 24	RT	69 LF CURB
35-36	22+32.47	22+86.40	HWY 24	RT	72 SY PAVEMENT
35	22+29.60		HWY 24	RT	TREE
35-36	22+56.46	24+34.58	HWY 24	LT	89 SY SIDEWALK
35-36	22+57.89	24+36.14	HWY 24	LT	195 LF CURB
36	22+99.40	24+29.00	HWY 24	LT & RT	ISLAND & CURB
35-36	21+67.75	24+24.58	HWY 24	LT	41 SY PAVEMENT
36	23+87.10		HWY 24	LT & RT	SAWCUT 61 LF
36	23+92.83		HWY 24	LT & RT	SAWCUT 61 LF
36	22+81.40	23+00.47	HWY 24	RT	9 SY SIDEWALK
36	24+24.38	24+77.75	HWY 24	LT	SAWCUT 54 LF
36	24+32.53	24+69.54	HWY 24	LT	SAWCUT 37 LF
36	24+62.99	24+85.99	HWY 24	LT	15 SY PAVEMENT
36	24+64.52	25+51.97	HWY 24	LT & RT	ISLAND & CURB
36	23+34.61	27+05.28	HWY 24	RT	171 SY PAVEMENT

SUMMARY OF QUANTITIES
SHEET 1 OF 11

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	3

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

REMOVAL OF IMPROVEMENTS					
SHEET NO.	STA.	STA.	ALIGNMENT	LOCATION	DESCRIPTION
36	23+42.98	24+28.09	HWY 24	RT	46 SY SIDEWALK & CURB RAMP
36	23+41.21	24+31.02	HWY 24	RT	119 LF CURB
36	24+20.03		HWY 24	RT	VEGETATION
36	24+14.20	24+81.68	HWY 24	RT	92 SY PAVEMENT
36	23+34.61	27+05.28	HWY 24	RT	SAWCUT 403 LF
36	24+77.58		HWY 24	RT	TREE
36	24+68.41	25+20.37	HWY 24	RT	27 SY SIDEWALK
36	24+73.94	25+77.85	HWY 24	LT	60 SY SIDEWALK
36	24+71.10	25+78.93	HWY 24	LT	139 LF CURB
36	24+66.27	25+21.35	HWY 24	RT	124 LF CURB
36	25+07.00	25+63.64	HWY 24	RT	67 SY PAVEMENT
36	25+49.85	26+10.96	HWY 24	RT	32 SY SIDEWALK
36	25+48.65	26+14.71	HWY 24	RT	142 LF CURB
36	24+60.16	27+25.08	HWY 24	LT	SAWCUT 313 LF
36	25+58.95	25+68.38	HWY 24	LT	VEGETATION
36	25+66.66	26+44.29	HWY 24	LT	148 SY PAVEMENT
36	26+05.14	26+49.42	HWY 24	RT	89 SY PAVEMENT
36	26+21.29	27+21.67	HWY 24	LT	152 LF CURB
36	26+24.32	27+19.62	HWY 24	LT	68 SY SIDEWALK
36	26+58.73		HWY 24	LT & RT	SAWCUT 61 LF
36	26+64.44		HWY 24	LT & RT	SAWCUT 61 LF
36	26+35.81	27+02.02	HWY 24	RT	174 LF CURB
36	26+36.44	26+85.96	HWY 24	RT	27 ST SIDEWALK & CURB RAMP
36	27+20.86	27+61.42	HWY 24	LT	SAWCUT 41 LF
36	27+22.49	27+60.13	HWY 24	LT	SAWCUT 38 LF
36	27+61.50	27+83.17	HWY 24	LT	61 LF CURB
36-38	27+55.93	34+10.55	HWY 24	LT	SAWCUT 707 LF
36-37	27+68.45	28+84.67	HWY 24	LT	36 SY PAVEMENT
36-37	27+79.13	28+32.06	HWY 24	LT	98 SY PAVEMENT
36-37	27+53.46	28+31.35	HWY 24	RT	24 SY PAVEMENT
36	27+61.68	27+99.88	HWY 24	RT	19 SY SIDEWALK & CURB RAMP
36-39	27+53.46	42+77.42	HWY 24	RT	SAWCUT 1540 LF
36-37	27+57.95	28+01.86	HWY 24	RT	77 LF CURB
36-37	27+86.14	28+42.61	HWY 24	RT	82 SY PAVEMENT
37	28+27.89	28+78.09	HWY 24	RT	91 LF CURB
37	28+29.38	28+75.51	HWY 24	RT	24 SY SIDEWALK
37	28+61.90	30+15.58	HWY 24	RT	322 SY PAVEMENT
37	28+24.13	28+76.19	HWY 24	LT	125 LF CURB
37	28+69.90	30+05.09	HWY 24	LT	333 SY PAVEMENT
37	29+14.84	29+31.95	HWY 24	RT	66 LF CURB
37	29+23.36		HWY 24	LT & RT	SAWCUT 52 LF
37	29+29.37		HWY 24	LT & RT	SAWCUT 52 LF
37	29+15.93	29+39.74	HWY 24	LT	46 LF CURB
37	29+16.53	29+31.25	HWY 24	RT	6 SY SIDEWALK
37	29+37.28	30+28.28	HWY 24	LT	INLET & PIPE
37	29+37.57	30+09.96	HWY 24	RT	INLET & PIPE
37	29+58.32	29+82.23	HWY 24	LT	POLES
37	30+04.49	30+86.64	HWY 24	RT	43 SY SIDEWALK
37	29+89.87	30+81.51	HWY 24	LT	48 SY PAVEMENT

REMOVAL OF IMPROVEMENTS					
SHEET NO.	STA.	STA.	ALIGNMENT	LOCATION	DESCRIPTION
37	29+91.36	30+77.81	HWY 24	LT	137 LF CURB
37	30+30.98		HWY 24	LT	INLET
37	30+48.38		HWY 24	LT & RT	SAWCUT 49 LF
37	30+54.38		HWY 24	LT & RT	SAWCUT 49 LF
37	30+00.01	31+01.52	HWY 24	RT	118 LF CURB
37	30+60.68		HWY 24	RT	INLET & PIPES
37	30+85.02	31+07.81	HWY 24	LT	POLES
37	30+84.00	31+00.42	HWY 24	RT	BOLLARDS
37	31+36.47		HWY 24	LT	18 LF CURB
37	31+55.02		HWY 24	LT	15 LF CURB
37	31+57.56		HWY 24	LT	POLE
37-38	30+63.54	34+03.65	HWY 24	LT	630 SY PAVEMENT
37	30+71.85	31+50.25	HWY 24	RT	136 SY PAVEMENT
37	31+45.72	32+99.05	HWY 24	RT	81 SY SIDEWALK
37-38	31+60.03	38+59.54	HWY 24	RT	95 SY SIDEWALK
37	31+45.07	32+99.01	HWY 24	RT	182 LF CURB
37	31+93.49	31+97.57	HWY 24	LT	11 LF CURB
37	32+16.16	32+21.36	HWY 24	LT	22 LF CURB
37	32+08.12		HWY 24	RT	TREE
37	32+47.17		HWY 24	LT	13 LF CURB
37	33+35.05	33+38.52	HWY 24	LT	14 LF CURB
37	32+73.40	32+78.05	HWY 24	LT	15 LF CURB
37	32+92.47	33+55.02	HWY 24	RT	103 SY PAVEMENT
37	33+44.98	33+78.25	HWY 24	RT	17 SY SIDEWALK
37	33+61.79	33+65.84	HWY 24	LT	17 LF CURB
37-38	33+41.99	33+84.95	HWY 24	RT	70 LF CURB
38	33+82.47		HWY 24	RT	SIGN
38	34+00.00		HWY 24	LT	SIGN
37-38	33+69.85	34+28.37	HWY 24	RT	99 SY PAVEMENT
38	34+19.44	35+37.55	HWY 24	RT	78 SY SIDEWALK
38	34+56.99		HWY 24	RT	TREE
38	34+75.75		HWY 24	RT	SIGN
38	34+04.59	34+10.55	HWY 24	LT	6 SY PAVEMENT
38	34+15.90	35+38.10	HWY 24	RT	180 LF CURB
38	34+95.05		HWY 24	RT	TREE
38	34+25.08	39+77.31	HWY 24	LT	574 SY PAVEMENT
38	34+87.76	35+25.91	HWY 24	LT	81 LF CURB
38	35+29.52		HWY 24	RT	SIGN
38	35+54.30	35+79.02	HWY 24	RT	36 LF CURB
38	35+77.19		HWY 24	LT & RT	SAWCUT 44 LF
38	35+82.44		HWY 24	LT & RT	SAWCUT 44 LF
38-39	34+25.08	41+89.04	HWY 24	LT	SAWCUT 785 LF
38-39	35+86.02	41+66.21	HWY 24	RT	376 SY SIDEWALK
38-39	35+57.99	40+17.03	HWY 24	LT	460 LF GUARDRAIL
38	35+84.00	37+77.19	HWY 24	RT	FENCE & RETAINING WALL
38	35+21.10	37+63.52	HWY 24	RT	786 SY PAVEMENT
38	37+05.16	37+35.22	HWY 24	RT	SAWCUT 32 LF
38	37+09.25		HWY 24	RT	SAWCUT 68 LF
38	37+27.59	37+38.11	HWY 24	RT	LANDSCAPING
38	37+65.51		HWY 24	RT	TREE
38	38+24.90		HWY 24	RT	TREE
38	39+14.17		HWY 24	RT	TREE

SUMMARY OF QUANTITIES
SHEET 2 OF 11

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000875
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	3

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

REMOVAL OF IMPROVEMENTS

SHEET NO.	STA.	STA.	ALIGNMENT	LOCATION	DESCRIPTION
38-39	35+85.27	41+70.22	HWY 24	RT	609 LF CURB
39	39+77.23	40+91.84	HWY 24	LT	31 SY PAVEMENT
39	39+77.31	39+87.50	HWY 24	LT	FLUME
39	39+45.00		HWY 24	RT	TREE
39	39+81.81	40+91.13	HWY 24	LT	69 SY SIDEWALK
39	40+21.42	40+26.25	HWY 24	LT	STAIRS
39	40+91.83	41+14.21	HWY 24	LT	FLUME
39	41+14.31	41+89.04	HWY 24	LT	81 SY PAVEMENT
39	41+36.94	41+89.04	HWY 24	LT	63 LF CURB
39	41+33.81	41+88.47	HWY 24	LT	43 SY SIDEWALK
39	41+65.51	42+09.61	HWY 24	RT	95 SY SIDEWALK
39	42+01.78	42+43.30	HWY 24	RT	19 SY SIDEWALK
40	200+09.70	203+50.00	CEDAR AVE	LT & RT	1359 SY PAVEMENT
40	200+08.36	200+34.24	CEDAR AVE	RT	35 LF CURB
40	200+61.47	200+62.65	CEDAR AVE	LT	8 LF WALL
40	200+69.33	200+85.84	CEDAR AVE	LT	33 SY PAVEMENT
40	200+17.85	200+71.86	CEDAR AVE	RT	72 SY SIDEWALK
40	200+51.88	200+56.27	CEDAR AVE	RT	FLUME
40	200+59.05	200+87.78	CEDAR AVE	RT	47 SY PAVEMENT
40	200+82.38	201+84.30	CEDAR AVE	RT	114 SY SIDEWALK
40	201+54.45		CEDAR AVE	LT	TREE
40	201+31.09	201+52.96	CEDAR AVE	LT	14 SY PAVEMENT
40	201+62.99	203+06.11	CEDAR AVE	RT	347 SY PAVEMENT
40	202+04.71	203+10.20	CEDAR AVE	RT	114 SY SIDEWALK
40	202+53.58	202+98.81	CEDAR AVE	RT	METAL POSTS
41	203+50.00	207+07.94	CEDAR AVE	LT & RT	1717 SY PAVEMENT
41	203+26.48	203+94.81	CEDAR AVE	LT	67 SY PAVEMENT
41	206+32.60		CEDAR AVE	RT	SIGN
41	206+86.81	207+07.43	CEDAR AVE	LT	22 LF CURB
REMOVAL OF IMPROVEMENTS TOTAL:					1 LUMP SUM

CLEARING AND GRUBBING
1 ACRE

CONTRACTOR FURNISHED SURVEYING AND STAKING
1 LS

MOBILIZATION
1 LS

TEMPORARY SHORING
1 LS

TEMPORARY BITUMINOUS PAVEMENT (TON)
500.0

MILL & OVERLAY

SHEET NO.	CENTERLINE	STA.	STA.	RESURFACING AREA (S.Y.)	COLDMILLING GREATER THAN 3 IN. (S.Y.)	TACK COAT (0.15 GAL/SY) (GAL.)	3.25 IN. ASPHALTIC CONCRETE MIXTURE PG 70-22 (SP125C MIX) (OVERLAY) (TON)
STATE ITEMS							
4	HWY 24	12+51.50	17+00.00	2855	2855	428	507.7
6	HWY 24	17+00.00	22+60.00	3469	3469	520	616.9
8	HWY 24	22+60.00	28+20.00	3960	3960	594	704.3
10	HWY 24	28+20.00	33+80.00	2959	2959	444	526.3
12	HWY 24	33+80.00	39+40.00	2810	2810	421	499.7
14	HWY 24	39+40.00	42+77.42	1668	1668	250	296.7
			SUBTOTAL:	17720	17721	2657	3152
CITY ITEMS							
16-18	HUTTIG AVE	497+94.97	798+71.78	273	273	41	48.6
			SUBTOTAL:	273	273	41	48.6
			TOTAL:		17994	2698	3200.2

COMPACTING IN CUT

SHEET NO.	CENTERLINE	STA.	STA.	COMPACTING IN CUT (STA.)
4-22	HWY 24	12+18.24	41+89.04	29.7
			TOTAL:	29.7

LINEAR GRADING FOR ENTRANCES

LOCATION	LINEAR GRADING CLASS 1 (STA.)
STATE ITEMS	
HWY 24 - STA. 13+34.13 LT	0.17
HWY 24 - STA. 19+63.33 LT	0.17
HWY 24 - STA. 21+77.82 RT	0.18
HWY 24 - STA. 22+43.38 LT	0.20
HWY 24 - STA. 22+58.32 RT	0.21
HWY 24 - STA. 24+46.07 RT	0.31
HWY 24 - STA. 25+35.23 RT	0.17
HWY 24 - STA. 26+00.22 LT	0.21
HWY 24 - STA. 26+22.42 RT	0.30
HWY 24 - STA. 28+96.47 LT	0.22
HWY 24 - STA. 28+96.83 RT	0.20
HWY 24 - STA. 29+62.16 LT	0.16
HWY 24 - STA. 29+65.24 RT	0.20
HWY 24 - STA. 30+97.09 LT	0.24
HWY 24 - STA. 31+23.54 RT	0.13
HWY 24 - STA. 31+46.10 LT	0.22
HWY 24 - STA. 32+07.56 LT	0.38
HWY 24 -STA. 32+61.56 LT	0.23
HWY 24 - STA. 33+21.37 RT	0.19
HWY 24 - STA. 33+50.04 LT	0.26
HWY 24 - STA. 34+00.56 RT	0.24
HWY 24 - STA. 35+28.56 LT	0.17
HWY 24 - STA. 35+42.40 RT	0.21
HWY 24 - STA. 35+87.46 RT	1.48
HWY 24 - STA. 41+53.54 LT	0.11
HWY 24 - STA. 41+83.69 RT	0.28
HWY 24 - STA. 42+58.21 RT	0.17
CEDAR AVE. - STA. 203+75.04 LT	0.38
CEDAR AVE. - STA. 205+62.36 LT	0.17
SUBTOTAL:	7.56
CITY ITEMS	
CEDAR AVE. - STA. 200+72.10 LT	0.26
CEDAR AVE. - STA. 200+74.75 RT	0.24
CEDAR AVE. - STA. 201+40.89 LT	0.18
CEDAR AVE. - STA. 201+94.52 RT	0.29
CEDAR AVE. - STA. 202+13.96 LT	0.17
SUBTOTAL:	1.14
TOTAL:	8.70

EARTHWORK

LOCATION	CLASS A EXCAVATION (CY)	CLASS 4 EXCAVATION (CY)	COMPACTING EMBANKMENT (CY)
STATE ITEMS			
HWY 24	4483		1997
CEDAR AVE	1241		109
ASH AVE	2069		15
RETAINING WALL 1	3	81	3
RETAINING WALL 2	0	8	0
RETAINING WALL 3	3	68	3
RETAINING WALL 4	6	106	6
RETAINING WALL 5	9	134	9
RETAINING WALL 6	215	185	215
SUBTOTAL:	8029	582	2357
CITY ITEMS			
CEDAR AVE	766		235
SUBTOTAL:	766	0	235
TOTAL:	8795	582	2592

OPTIONAL PAVEMENT

SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	OPTIONAL PAVEMENT HWY 24 (S.Y.)	6 IN. TYPE 5 AGGREGATE BASE (S.Y.)	COMMENTS
STATE ITEMS							
4	HWY 24	12+18.24	17+00.00	LT	94	94	
4	HWY 24	12+64.73	17+00.00	RT	113	113	
6	HWY 24	17+00.00	22+60.00	LT	132	132	
6	HWY 24	17+00.00	22+60.00	RT	143	143	
8	HWY 24	22+60.00	28+20.00	LT	242	242	
8	HWY 24	22+60.00	28+20.00	RT	120	120	
10	HWY 24	28+20.00	33+80.00	LT	125	125	
10	HWY 24	28+20.00	33+80.00	RT	125	125	
12	HWY 24	33+80.00	39+40.00	LT	168	168	
12	HWY 24	33+80.00	39+40.00	RT	125	125	
14	HWY 24	39+40.00	41+89.04	LT	86	86	
14	HWY 24	39+40.00	41+63.08	RT	60	60	
18	CEDAR AVE	203+50.00	207+07.94	LT & RT	965	965	
18	ASH AVE	100+12.44	101+91.55	LT & RT	571	571	
				SUBTOTAL:	3069	3069	
CITY ITEMS							
16	CEDAR AVE	200+07.31	203+50.00	LT & RT	1127	1506	AGG BASE BID ITEM INCLUDES QTY FOR ON-STREET PARKING
				SUBTOTAL:	1127	1506	
				TOTAL:	4196	4575	

PAVEMENT REPAIR FOR CULVERT INSTALLATION

SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	FURNISHING & PLACING CONCRETE MATERIAL (S.Y.)	SUBGRADE COMPACTION (6 IN.) (S.Y.)	TYPE 1 OR 5 AGGREGATE FOR BASE (4 IN. THICK) (S.Y.)	DOWEL BAR (EACH)	FULL DEPTH SAW CUT (L.F.)
4	HWY 24	12+48.82	12+81.18	LT	20	15	15	70	70
4	HWY 24	12+28.73	12+65.24	RT	20	15	15	69	69
6	HWY 24	18+67.44	19+08.76	RT	22	16	16	75	75
6	HWY 24	20+50.12	20+57.46	LT & RT	47	35	35	160	160
6	HWY 24	21+11.37	21+59.73	LT	25	19	19	85	85
6	HWY 24	23+87.10	23+92.83	LT & RT	36	27	27	122	122
6	HWY 24	24+24.38	24+77.75	LT	30	22	22	91	91
8	HWY 24	26+58.73	26+64.44	LT & RT	37	28	28	122	122
8	HWY 24	27+20.86	27+61.42	LT	26	19	19	79	79
10	HWY 24	29+23.36	29+29.37	LT & RT	35	26	26	105	105
12	HWY 24	30+48.38	30+54.38	LT & RT	32	24	24	98	98
14	HWY 24	35+77.19	35+82.44	LT & RT	26	19	19	88	88
				TOTAL:	354	265	265	1164	1164

SUMMARY OF QUANTITIES
SHEET 3 OF 11

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	3

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

CURB & GUTTER								
SHEET	STA.	STA.	ALIGNMENT	LOCATION	TYPE B C & G	MODIFIED TYPE B C & G	TYPE S CURB	6" TYPE 5 AGG BASE
					LF	LF	LF	SY
STATE ITEMS								
4	12+19.40	13+05.42	HWY 24	LT	91			33
4	12+66.73	15+79.48	HWY 24	RT	360			130
4	13+57.86	15+52.51	HWY 24	LT	195			70
4	16+07.19	17+00.00	HWY 24	RT	112			40
4	16+36.51	17+00.00	HWY 24	LT	64			23
6	17+00.00	19+35.33	HWY 24	LT	236			85
6	17+00.00	18+81.09	HWY 24	RT	192			69
6	19+05.47	20+47.09	HWY 24	RT	189			68
6	19+91.33	21+25.16	HWY 24	LT	151			55
6	20+69.81	21+18.73	HWY 24	RT	81			29
6	21+47.31	22+15.99	HWY 24	LT	87			31
6	21+34.23	21+39.50	HWY 24	RT			5	
6	22+19.57	22+37.90	HWY 24	RT			18	
8	22+70.76	24+39.89	HWY 24	LT	187			68
8	22+78.73	23+02.60	HWY 24	RT			24	
8	22+85.07	23+07.59	HWY 24	RT	33			12
8	23+36.61	24+05.07	HWY 24	RT	80			29
8	24+62.13	25+63.25	HWY 24	LT	119			43
8	24+66.19	25+19.62	HWY 24	RT			53	
8	24+85.73	25+06.96	HWY 24	RT	21			8
8	25+50.94	26+07.87	HWY 24	RT			57	
8	25+63.50	25+95.42	HWY 24	RT	32			12
8	26+37.28	27+00.78	HWY 24	RT			76	
8	26+38.68	27+22.81	HWY 24	LT	103			37
8	26+49.42	27+03.24	HWY 24	RT	75			27
8	27+55.45	28+20.00	HWY 24	RT	78			28
8	27+57.97	28+20.00	HWY 24	LT	82			30
10-12	27+89.72	28+30.14	HWY 24	RT			41	
10-12	27+98.12	28+29.46	HWY 24	LT			32	
10	28+20.00	28+65.42	HWY 24	LT	46			17
10	28+20.00	28+63.96	HWY 24	RT	44			16
10	28+72.17	28+76.41	HWY 24	RT			5	
10	29+17.32	29+32.20	HWY 24	RT			15	
10	29+25.21	29+30.12	HWY 24	RT	5			
10	29+89.85	30+07.83	HWY 24	LT			18	
10	29+96.42	30+61.06	HWY 24	LT	64			23
10	30+10.25	30+86.59	HWY 24	RT	77			28
10	30+62.97	30+72.13	HWY 24	LT			9	
10	31+22.06	31+32.20	HWY 24	LT			16	
10	31+47.09	31+66.34	HWY 24	RT			20	
10	31+55.33	31+60.25	HWY 24	LT			8	
10	31+59.63	32+85.37	HWY 24	RT	126			46
10	31+69.81	31+83.09	HWY 24	LT	14			5
10	32+31.06	32+34.30	HWY 24	LT	4			1
10	32+88.39	33+23.28	HWY 24	LT	35			13
10	32+88.85	32+97.83	HWY 24	RT			9	

CURB & GUTTER								
SHEET	STA.	STA.	ALIGNMENT	LOCATION	TYPE B C & G	MODIFIED TYPE B C & G	TYPE S CURB	6" TYPE 5 AGG BASE
					LF	LF	LF	SY
STATE ITEMS CONT'D								
10	33+57.12	33+69.95	HWY 24	RT	13			5
10-12	33+76.79	34+06.04	HWY 24	LT	51			18
12	34+28.36	35+10.53	HWY 24	RT	82			30
12	34+29.62	34+91.80	HWY 24	LT	79			29
12	35+65.82	39+40.00	HWY 24	LT	374			135
12	35+74.40	37+08.54	HWY 24	RT	134			48
12	38+07.54	39+40.00	HWY 24	RT	133			48
14	39+40.00	41+28.54	HWY 24	LT	189			68
14	39+40.00	41+41.99	HWY 24	RT	202			73
14	41+78.49	41+89.04	HWY 24	LT	11			4
18	203+63.26	204+00.26	CEDAR AVE	RT	0	37		13
18	203+52.22	204+09.73	CEDAR AVE	RT	95			34
18	203+89.04	205+23.00	CEDAR AVE	LT	135			49
18	204+98.30	207+07.94	CEDAR AVE	RT	271			98
18	205+06.80	206+15.98	CEDAR AVE	RT		109		39
18	206+01.73	207+09.94	CEDAR AVE	LT	83			30
20	100+03.11	101+91.42	ASH AVE	RT	216			78
20	100+25.21	101+91.42	ASH AVE	LT	210			76
				SUBTOTAL:	5261	146	406	1951
CITY ITEMS								
16	200+07.31	200+59.21	CEDAR AVE	RT	63			23
16	200+10.87	200+54.05	CEDAR AVE	LT	31			11
16	200+90.11	201+70.15	CEDAR AVE	RT	123			44
16	200+90.14	201+22.06	CEDAR AVE	LT	31			11
16	200+93.21	201+63.46	CEDAR AVE	RT		72		26
16	201+59.72	201+95.96	CEDAR AVE	LT	36			13
16	202+19.12	202+96.62	CEDAR AVE	RT	78			28
16	202+31.43	202+86.30	CEDAR AVE	LT	81			29
16-18	203+13.38	203+54.75	CEDAR AVE	LT	70			25
				SUBTOTAL:	513	72	0	210
				TOTAL	5774	218	406	2161

RAISED CONCRETE ISLAND							
SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	4 IN. CONCRETE MEDIAN STRIP	6 IN. CONCRETE MEDIAN STRIP	TRUNCATED DOMES
					(S.Y.)	(S.Y.)	(S.F.)
66	HWY 24	12+51.50	13+75.71	LT & RT		96	
67-68	HWY 24	18+10.73	27+01.00	LT & RT		685	
68	HWY 24	27+04.98	27+20.77	RT	9		24
68	HWY 24	27+13.79	27+20.70	RT	4		20
69	HWY 24	27+99.00	29+37.56	RT		31	
55	HWY 24	37+25.58	37+31.31	RT	7		
				TOTAL:	20	812	44

CHAIN-LINK FENCE				
SHEET NO.	LOCATION	STA.	STA.	60" CHAIN-LINK FENCE
				LF
45	RET WALL 4	10+00.00	10+63.77	64
45	RET WALL 5	10+00.00	10+91.73	92
46-47	RET WALL 6	10+00.00	15+37.72	538
			TOTAL:	693

STEPS					
SHEET NO.	CENTERLINE	STA.	STA.	CLASS B-1 CONCRETE	REINFORCING STEEL
				CY	LB
4	HWY 24 RT	12+83.29	12+90.29	1.0	46
			TOTAL:	1.0	46

RETAINING WALLS						
SHEET NO.	CENTERLINE	STA.	STA.	CLASS B-1 CONCRETE (RETAINING WALLS)	REINFORCING STEEL (RETAINING WALLS)	COMMENTS
				CY	LB	
49	HWY 24 RT	48+16.44	48+55.28	13.3	1267	RETAINING WALL 1
50	HWY 24 RT	51+65.00	54+26.98	6.2	515	RETAINING WALL 2
51	HWY 24 RT	65+90.00	66+33.21	11.8	1182	RETAINING WALL 3
51	HWY 24 RT	66+38.21	67+06.66	26.8	4454	RETAINING WALL 4
51	HWY 24 RT	67+25.66	67+49.65	29.2	4340	RETAINING WALL 5
51	HWY 24 RT	67+25.66	67+49.65	273.3	46225	RETAINING WALL 6
			TOTAL:	360.6	57983	

HANDRAILING WITHOUT BALUSTERS				
SHEET NO.	LOCATION	STA.	STA.	HANDRAILING WITHOUT BALUSTERS
				LF
	RET WALL 1	10+00.00	10+39.43	39
	RET WALL 3	10+00.00	10+37.35	37
			TOTAL:	76

SUMMARY OF QUANTITIES
SHEET 4 OF 11

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	3

COUNTY
JACKSON

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REV.

CONCRETE SIDEWALK & SHARED USE PATH							
SHEET NO.	STA.	STA.	LOCATION	CONCRETE CURB RAMP (S.Y.)	TRUNCATED DOMES (S.F.)	CONCRETE SIDEWALK 4 IN. (S.Y.)	PCCP SHARED USE PATH 6 IN. (S.Y.)
STATE ITEMS							
4	12+26.03	12+37.36	HWY 24 LT	5.2	10		
4	12+37.36	13+21.17	HWY 24 LT	0.0		60.3	
4	12+73.07	12+83.29	HWY 24 RT	9.3	13		
4	12+74.00	15+37.00	HWY 24 RT	0.0			338.2
4	13+44.90	15+37.18	HWY 24 LT	0.0		114.6	
4	15+37.00	15+54.00	HWY 24 RT	25.8	12		
4	15+37.18	15+54.18	HWY 24 LT	17.2	12		
4	15+54.00	15+61.77	HWY 24 RT	0.0			8.0
4	15+61.77	15+76.55	HWY 24 RT	24.2	22		
4	15+61.69	15+75.89	HWY 24 LT	8.1	10		
4	16+11.40	16+27.52	HWY 24 RT	16.4	20		
4	16+13.13	16+27.33	HWY 24 LT	8.1	10		
4	16+27.52	16+34.84	HWY 24 RT	0.0			8.1
4	16+34.84	16+51.34	HWY 24 RT	26.0	11		
4	16+34.84	16+51.34	HWY 24 LT	16.4	11		
4	16+51.34	17+00.00	HWY 24 RT	0.0			54.1
4	16+51.34	17+00.00	HWY 24 LT	0.0		27.3	
6	17+00.00	19+44.16	HWY 24 LT	0.0		137.9	
6	17+00.00	18+64.93	HWY 24 RT	0.0			182.9
6	18+64.93	18+78.19	HWY 24 RT	13.6	24		
6	19+08.47	19+22.65	HWY 24 RT	20.9	24		
6	19+22.65	20+41.47	HWY 24 RT	0.0		76.2	
6	19+82.50	20+97.84	HWY 24 LT	0.0		66.3	
6	20+24.96	20+41.52	HWY 24 RT	15.6	28		
6	20+97.84	21+14.50	HWY 24 LT	8.8	19		
6	20+75.38	20+91.94	HWY 24 RT	15.6	28		
6	20+91.94	21+32.88	HWY 24 RT	0.0			52.4
6	21+57.24	21+73.91	HWY 24 LT	8.8	19		
6	21+73.91	22+29.19	HWY 24 LT	0.0		30.6	
6	22+16.00	22+41.90	HWY 24 RT	0.0			31.0
8	22+57.56	24+12.72	HWY 24 LT	0.0		86.0	
8	22+74.73	22+86.54	HWY 24 RT	0.0			14.7
8	22+86.54	23+04.53	HWY 24 RT	17.9	28		
8	23+39.91	23+58.46	HWY 24 RT	18.0	28		
8	23+58.46	24+27.86	HWY 24 RT	0.0			74.4
8	24+12.72	24+29.39	HWY 24 LT	8.8	19		
8	24+64.43	25+21.03	HWY 24 RT	0.0			57.7
8	24+73.00	24+89.75	HWY 24 LT	8.8	19		
8	24+89.75	25+77.13	HWY 24 LT	0.0		56.0	
8	25+50.18	26+09.61	HWY 24 RT	0.0			49.2
8	26+24.14	26+95.84	HWY 24 LT	0.0		62.8	
8	26+35.24	26+66.83	HWY 24 RT	0.0			26.9
8	26+66.83	26+87.04	HWY 24 RT	15.0	29		
8	26+95.84	27+12.51	HWY 24 LT	10.6	19		

CONCRETE SIDEWALK & SHARED USE PATH							
SHEET NO.	STA.	STA.	LOCATION	CONCRETE CURB RAMP (S.Y.)	TRUNCATED DOMES (S.F.)	CONCRETE SIDEWALK 4 IN. (S.Y.)	PCCP SHARED USE PATH 6 IN. (S.Y.)
STATE ITEMS CONT'D							
8	27+60.75	27+77.30	HWY 24 RT	16	28		
8	27+68.43	28+00.09	HWY 24 RT	23	29		
8	27+70.25	27+88.59	HWY 24 RT			7	
8	27+77.30	27+82.59	HWY 24 RT			6	
8	27+82.59	28+00.59	HWY 24 RT	25	10		
8	28+00.09	28+20.00	HWY 24 LT			11	
8	28+00.59	28+20.00	HWY 24 RT				22
10	28+20.00	28+75.78	HWY 24 LT			35	
10	28+20.00	28+78.22	HWY 24 RT				65
10	29+18.09	29+38.01	HWY 24 LT			9	
10	29+16.75	29+32.77	HWY 24 RT				21
10	29+84.84	30+74.97	HWY 24 LT			49	
10	29+96.31	31+01.51	HWY 24 RT				116
10	31+17.41	31+36.30	HWY 24 LT			11	
10	31+46.07	32+99.15	HWY 24 RT				171
10	31+56.89	31+96.56	HWY 24 LT			22	
10	32+18.14	32+47.77	HWY 24 LT			16	
10	32+75.19	33+36.48	HWY 24 LT			34	
10-12	33+42.52	33+84.45	HWY 24 RT				46
10-12	33+63.59	33+81.35	HWY 24 LT			10	
12	33+81.35	33+97.11	HWY 24 LT	8	18		
12	34+16.88	35+27.73	HWY 24 RT				119
12	34+39.92	34+56.59	HWY 24 LT	9	19		
12	34+56.59	35+05.00	HWY 24 LT			27	
12	35+52.62	39+40.00	HWY 24 LT			215	
12	35+57.11	37+33.32	HWY 24 RT				183
12	37+80.72	39+40.00	HWY 24 RT				169
14	39+40.00	41+40.64	HWY 24 LT			112	
14	39+40.00	41+63.45	HWY 24 RT				246
14	41+66.38	42+27.92	HWY 24 LT			35	
16	200+11.04	200+28.70	CEDAR AVE RT	18	21		
16-18	203+39.67	204+26.05	CEDAR AVE RT			65	
18	204+14.10	204+29.39	CEDAR AVE RT	8	19		
18	204+77.45	204+93.40	CEDAR AVE RT	8	19		
18	204+93.43	206+76.95	CEDAR AVE RT			155	
20	100+28.25	101+80.42	ASH AVE RT			106	
20	100+44.14	101+80.42	ASH AVE LT			99	
18	698+51.11	699+58.93	N ASH AVE EXIST.			59	
			SUBTOTAL:	434	578	1800	2056
CITY ITEMS							
16	200+11.04	200+28.70	CEDAR AVE RT	18	21		
16	200+28.70	200+71.57	CEDAR AVE RT				54.6
16	200+81.77	201+84.31	CEDAR AVE RT				123.4
16	202+04.73	203+16.33	CEDAR AVE RT				134.0
16	202+22.86	202+41.88	CEDAR AVE LT			9.9	
16	202+41.88	202+58.88	CEDAR AVE LT	12.1	10		
16	202+47.38	202+53.38	CEDAR AVE RT	4.0	10		
16	202+58.88	202+82.25	CEDAR AVE LT			28.4	
			SUBTOTAL:	34	41	38	312
			TOTAL:	468	619	1839	2368

GUARDRAIL					
SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	GUARRAIL TYPE D (LF)
4	HWY 24	14+56.54	14+91.55	LT	35
				TOTAL:	35

ROCK LINING							
SHEET NO.	CENTERLINE	STA.	LOCATION	LENGTH (FT.)	WIDTH (FT.)	DEPTH (FT.)	ROCK LINING (C.Y.)
139	HWY 24	30+30.77	RT	25	30	2.5	69
						TOTAL:	69

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SHEET 5 OF 11

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RONNIE L. WILLIAMS
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PROFESSIONAL ENGINEER

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ENTRANCES

SHEET NO.	STA.	LOCATION	GRAVEL (A) (S.Y.)	7" PAVED APPROACH (S.Y.)	8" PAVED APPROACH (S.Y.)	4" TYPE 5 AGGREGATE BASE (S.Y.)	COMMENTS
			STATE ITEMS				
4	STA. 13+34.13 LT	HWY 24			64	64	
6	STA. 19+63.33 LT	HWY 24			71	71	
6	STA. 21+77.82 RT	HWY 24			196	196	
6	STA. 22+43.38 LT	HWY 24			195	195	
6	STA. 22+58.32 RT	HWY 24			87	87	
8	STA. 24+46.07 RT	HWY 24			121	121	
8	STA. 25+35.23 RT	HWY 24			81	81	
8	STA. 26+00.22 LT	HWY 24			126	126	
8	STA. 26+22.42 RT	HWY 24			110	110	
10	STA. 28+96.47 LT	HWY 24			116	116	
10	STA. 28+96.83 RT	HWY 24			99	99	
10	STA. 29+62.16 LT	HWY 24			92	92	
10	STA. 29+65.24 RT	HWY 24			158	158	
10	STA. 30+97.09 LT	HWY 24			127	127	
10	STA. 31+23.54 RT	HWY 24			112	112	
10	STA. 31+46.10 LT	HWY 24			62	62	
10	STA. 32+07.56 LT	HWY 24			109	109	
10	STA. 32+61.56 LT	HWY 24			83	83	
10	STA. 33+21.37 RT	HWY 24			110	110	
10	STA. 33+50.04 LT	HWY 24			91	91	
12	STA. 34+00.56 RT	HWY 24			105	105	
12	STA. 35+28.56 LT	HWY 24			107	107	
12	STA. 35+42.40 RT	HWY 24			126	126	
12	STA. 35+87.46 RT	HWY 24	165			0	
12	STA. 37+54.54 RT	HWY 24			627	627	
14	STA. 41+53.54 LT	HWY 24			45	45	
14	STA. 41+83.69 RT	HWY 24			7	7	
18	STA. 203+75.04 LT	CEDAR AVE.		63		63	
18	STA. 205+62.36 LT	CEDAR AVE.		117		117	
		SUBTOTAL:	165	180	3227	3407	
			CITY ITEMS				
16	STA. 200+72.10 LT	CEDAR AVE.		59		0	
16	STA. 200+74.75 RT	CEDAR AVE.			61	61	
16	STA. 201+28.34 RT	CEDAR AVE.			127		ON-STREET PARKING. AGG BASE PAID FOR UNDER BID ITEM "6 IN. TYPE 5 AGGREGATE BASE"
16	STA. 201+40.89 LT	CEDAR AVE.		46		46	
16	STA. 201+94.52 RT	CEDAR AVE.			104	104	
16	STA. 202+13.96 LT	CEDAR AVE.		42		42	
18	STA. 203+19.16 RT	CEDAR AVE.			125	125	
16	STA. 203+81.76 RT	CEDAR AVE.			54		ON-STREET PARKING. AGG BASE PAID FOR UNDER BID ITEM "6 IN. TYPE 5 AGGREGATE BASE"
16	STA. 205+56.98 RT	CEDAR AVE.			198		ON-STREET PARKING. AGG BASE PAID FOR UNDER BID ITEM "6 IN. TYPE 5 AGGREGATE BASE"
4	STA. 498+51.85 RT	N HUTTIG AVE.			17	17	
		SUBTOTAL:	0	147	686	833	
		TOTAL:	165	327	3913	4240	

SODDING

SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	TALL FESCUE SODDING (SY)	TEMPORARY SEEDING (AC)
			STATE ITEMS CONT'D			
8	HWY 24	25+56.64	25+79.74	LT	15	0.00
8	HWY 24	25+78.30	26+03.56	RT	6	0.00
8	HWY 24	26+20.65	27+03.42	LT	46	0.01
8	HWY 24	26+35.84	26+65.96	RT	6	0.00
8	HWY 24	26+41.41	26+74.70	RT	9	0.00
8	HWY 24	26+65.84	27+04.48	LT	8	0.00
8	HWY 24	26+70.11	27+00.29	RT	36	0.01
8	HWY 24	26+88.09	27+19.81	LT	37	0.01
8-10	HWY 24	27+57.23	28+77.76	RT	34	0.01
8	HWY 24	27+60.84	27+85.06	LT	9	0.00
8	HWY 24	27+76.75	27+88.50	LT	2	0.00
8	HWY 24	27+70.25	27+88.59	RT	7	0.00
8-10	HWY 24	27+94.59	28+29.09	LT	8	0.00
8-10	HWY 24	27+98.13	28+75.78	LT	27	0.01
8-10	HWY 24	27+94.59	28+74.37	RT	42	0.01
10	HWY 24	29+16.75	29+32.77	RT	6	0.00
10	HWY 24	29+16.84	29+39.26	LT	9	0.00
10	HWY 24	29+83.80	30+76.69	LT	51	0.01
10	HWY 24	29+96.46	31+01.71	RT	322	0.07
10	HWY 24	30+00.64	30+97.00	RT	50	0.01
10	HWY 24	29+96.81	30+69.31	LT	15	0.00
10	HWY 24	31+17.41	31+36.30	LT	28	0.01
10	HWY 24	31+20.29	31+33.13	LT	3	0.00
10	HWY 24	31+46.07	32+90.32	RT	45	0.01
10	HWY 24	31+49.32	32+95.87	RT	78	0.02
10	HWY 24	31+55.78	31+98.07	LT	47	0.01
10	HWY 24	31+61.80	31+91.36	LT	8	0.00
10	HWY 24	32+16.98	32+49.22	LT	35	0.01
10	HWY 24	32+23.05	32+42.57	LT	4	0.00
10	HWY 24	32+73.89	33+37.78	LT	25	0.01
10	HWY 24	32+80.26	33+31.42	LT	15	0.00
10-12	HWY 24	33+42.52	33+84.45	RT	8	0.00
10-12	HWY 24	33+46.62	33+80.45	RT	15	0.00
10-12	HWY 24	33+62.29	34+05.63	LT	24	0.00
10-12	HWY 24	33+68.65	33+89.46	LT	5	0.00
12	HWY 24	34+16.88	35+29.84	RT	23	0.00
12	HWY 24	34+18.99	35+02.67	RT	31	0.01
12	HWY 24	34+30.01	35+06.30	LT	22	0.00
12	HWY 24	34+48.24	34+99.94	LT	15	0.00
12	HWY 24	35+54.97	37+43.04	RT	456	0.09
12-14	HWY 24	35+51.32	41+23.54	LT	60	0.01
12-14	HWY 24	35+57.68	41+42.06	LT	112	0.02
12-14	HWY 24	37+35.22	41+68.92	RT	1238	0.26

ADJUSTING STRUCTURES

SHEET NO.	CENTERLINE	STA.	LOCATION	ADJUSTING MANHOLE EA	ADJUSTING BASIN OR INLET EA
			STATE ITEMS		
4	HWY 24	12+74.23	LT	1	
4	HWY 24	13+01.89	LT		1
4	HWY 24	13+52.36	RT		1
6	HWY 24	18+71.02	LT		1
10	HWY 24	28+45.10	RT		1
12	HWY 24	34+40.46	RT		1
12	HWY 24	35+21.01	RT		1
14	HWY 24	40+97.45	RT		1
14	HWY 24	41+59.26	RT		1
18	CEDAR AVE	206+50.51	RT		1
18	CEDAR AVE	206+55.99	RT		1
			SUBTOTAL:	1	10
			CITY ITEMS		
16	CEDAR AVE	201+50.57	LT	1	
16	CEDAR AVE	203+36.67	LT	1	
			SUBTOTAL:	2	0
			TOTAL:	3	10

SODDING

SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	TALL FESCUE SODDING (SY)	TEMPORARY SEEDING (AC)
			STATE ITEMS			
4	HWY 24	12+21.13	12+81.34	LT	34	0.01
4	HWY 24	12+32.06	13+20.80	LT	74	0.02
4	HWY 24	12+69.50	12+82.55	RT	29	0.01
4	HWY 24	12+75.44	13+24.72	LT	20	0.00
4	HWY 24	12+77.56	15+42.00	RT	240	0.05
4	HWY 24	12+84.06	12+90.02	RT	8	0.00
4	HWY 24	13+43.39	13+66.83	LT	14	0.00
4	HWY 24	13+45.46	15+42.16	LT	171	0.04
4	HWY 24	13+74.83	15+68.91	LT	591	0.12
4	HWY 24	15+49.16	15+71.69	LT	14	0.00
4	HWY 24	15+49.01	1567.9.3	RT	13	0.00
4	HWY 24	15+60.32	15+79.51	LT	21	0.00
4	HWY 24	15+60.83	15+68.48	RT	4	0.00
4	HWY 24	16+09.51	16+28.84	LT	21	0.00
4	HWY 24	16+10.23	17+00.00	RT	21	0.00
4	HWY 24	16+17.84	16+39.84	LT	14	0.00
4	HWY 24	16+19.12	17+00.00	LT	121	0.03
4	HWY 24	16+18.01	16+39.84	RT	15	0.00
4	HWY 24	16+46.34	17+00.00	LT	29	0.01
4	HWY 24	16+46.34	17+00.00	RT	50	0.01
6	HWY 24	17+00.00	17+97.28	LT	17	0.00
6	HWY 24	17+00.00	19+43.47	LT	156	0.03
6	HWY 24	17+00.00	17+82.00	RT	185	0.04
6	HWY 24	17+00.00	18+71.32	RT	80	0.02
6	HWY 24	18+01.91	19+49.82	LT	94	0.02
6	HWY 24	19+16.28	20+32.01	RT	92	0.02
6	HWY 24	19+77.52	21+21.76	LT	44	0.01
6	HWY 24	19+83.19	21+06.18	LT	38	0.01
6	HWY 24	20+25.14	20+49.34	RT	38	0.01
6	HWY 24	20+72.83	21+40.90	RT	35	0.01
6	HWY 24	20+85.27	21+32.88	RT	21	0.00
6	HWY 24	21+49.91	22+30.99	LT	18	0.00
6	HWY 24	21+65.56	22+24.13	LT	17	0.00
6	HWY 24	22+16.35	22+41.01	RT	4	0.00
6	HWY 24	22+18.23	22+39.05	RT	8	0.00
6-8	HWY 24	22+56.26	24+37.04	LT	30	0.01
8	HWY 24	22+62.62	24+21.03	LT	50	0.01
8	HWY 24	22+75.88	23+04.53	RT	5	0.00
8	HWY 24	22+75.28	22+95.59	RT	7	0.00
8	HWY 24	23+39.91	24+27.86	RT	19	0.00
8	HWY 24	23+49.41	24+19.20	RT	33	0.01
8	HWY 24	24+66.19	25+21.40	RT	30	0.01
8	HWY 24	24+65.10	25+51.63	LT	21	0.00
8	HWY 24	24+71.51	25+01.97	RT	9	0.00
8	HWY 24	24+81.46	25+19.92	LT	9	0.00
8	HWY 24	25+48.92	26+09.77	RT	40	0.01

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000875
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	3

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

SUMMARY OF QUANTITIES
SHEET 6 OF 11

REV.

SODDING						
SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	TALL FESCUE SODDING	TEMPORARY SEEDING
					(SY)	(AC)
STATE ITEMS CONT'D						
14	HWY 24	41+65.51	42+27.88	LT	45	0.01
14	HWY 24	41+83.48	42+28.69	LT	37	0.01
14	HWY 24	41+98.65	42+42.46	RT	40	0.01
18	CEDAR AVE	203+50.00	203+92.22	LT	48	0.01
18	CEDAR AVE	203+50.00	203+72.36	RT	41	0.01
18	CEDAR AVE	203+50.00	204+03.26	RT	28	0.01
18	CEDAR AVE	203+81.54	205+37.50	LT	234	0.05
18	CEDAR AVE	203+98.26	204+21.08	RT	6	0.00
18	CEDAR AVE	204+86.23	205+08.86	RT	6	0.00
18	CEDAR AVE	204+95.33	206+43.18	RT	340	0.07
18	CEDAR AVE	206+46.31	206+76.95	RT	210	0.04
18	CEDAR AVE	206+13.98	207+07.94	RT	46	0.01
18	CEDAR AVE	205+87.23	207+07.38	LT	104	0.02
20	ASH AVE	100+19.40	100+56.21	RT	43	0.01
20	ASH AVE	100+32.10	100+57.32	LT	45	0.01
20	ASH AVE	100+29.38	101+54.92	RT	221	0.05
20	ASH AVE	100+48.88	101+54.83	LT	115	0.02
				SUBTOTAL:	7255	1.50
CITY ITEMS						
16	CEDAR AVE	200+10.00	200+71.70	RT	40	0.01
16	CEDAR AVE	200+10.92	200+64.16	LT	12	0.00
16	CEDAR AVE	200+19.76	200+68.97	RT	60	0.01
16	CEDAR AVE	200+80.53	200+95.25	RT	31	0.01
16	CEDAR AVE	200+79.94	201+32.31	LT	37	0.01
16	CEDAR AVE	200+82.62	201+84.31	RT	37	0.01
16	CEDAR AVE	201+44.89	202+06.21	LT	50	0.01
16	CEDAR AVE	201+61.48	201+84.31	RT	50	0.01
16	CEDAR AVE	202+04.73	202+47.88	RT	96	0.02
16	CEDAR AVE	202+18.29	202+76.51	LT	38	0.01
16	CEDAR AVE	202+52.88	203+13.40	RT	132	0.03
16	CEDAR AVE	202+04.73	203+18.00	RT	20	0.00
16	CEDAR AVE	203+16.65	203+50.00	LT	42	0.01
16	CEDAR AVE	203+39.67	203+50.00	RT	26	0.01
16	CEDAR AVE	203+42.65	203+50.00	RT	3	0.00
				SUBTOTAL:	674	0.14
				TOTAL:	7929	1.6

TEMPORARY EROSION CONTROL - INITIAL PHASE											
								SEDIMENT TRAP			
SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	CURB INLET CHECK	ROCK DITCH CHECK	DITCH CHECK SPACING	EXCAVATION	ROCK	SILT FENCE	SEDIMENT REMOVAL
					(EA.)	(FT.)	(FT.)	(C.Y.)	(C.Y.)	(FT.)	(C.Y.)
STATE ITEMS											
84	HWY 24	12+33.33		RT	1						1
84	HWY 24	12+58.62		LT	1						1
84	HWY 24	12+68.14		RT	1						1
84	HWY 24	12+68.25		RT	1						1
84	HWY 24	12+84.58		LT	1						1
84	HWY 24	12+93.47		LT	1						1
87	HWY 24	29+36.53		RT	1						1
87	HWY 24	29+37.41		LT	1						1
87	HWY 24	30+30.13		RT				5	5		1
87	HWY 24	30+31.09		LT	1						1
87	HWY 24	30+60.49		RT	1						1
87	HWY 24	33+61.55		RT	1						1
89	HWY 24	40+50.83		LT				5	5		1
89	HWY 24	41+34.00		RT	1						1
89	HWY 24	42+19.68		RT	1						1
				SUBTOTAL:	13	0	0	10	10	0	15
CITY ITEMS											
90	CEDAR AVE	199+85.00		RT				5	5		1
90	CEDAR AVE	200+06.69		RT	1						1
90	CEDAR AVE	200+26.94		RT		8					1
90	CEDAR AVE	200+65.77		RT		8					1
90	CEDAR AVE	200+86.73	201+76.60	RT		32	32				4
90	CEDAR AVE	202+12.58	202+72.07	RT		32	20				4
90	CEDAR AVE	203+22.24		LT	1						1
				SUBTOTAL:	2	80		5	5	0	13
				EROSION CONTROL INITIAL PHASE - TOTAL:	15	80		15	15	0	28

SUMMARY OF QUANTITIES
SHEET 7 OF 11

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	3

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

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DESCRIPTION

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REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

TEMPORARY EROSION CONTROL - CONSTRUCTION PHASE

SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	CURB INLET CHECK	ROCK DITCH CHECK	DITCH CHECK SPACING	SEDIMENT TRAP		SILT FENCE	TYPE 3B EROSION CONTROL BLANKET	SEDIMENT REMOVAL
								EXCAVATION	ROCK			
					(EA.)	(FT.)	(FT.)	(C.Y.)	(C.Y.)	(FT.)	(S.Y.)	(C.Y.)
STATE ITEMS												
93	HWY 24	12+33.58		RT	1							1
93	HWY 24	12+67.26		RT	1							1
93	HWY 24	12+89.95		LT	1							1
93	HWY 24	13+01.57		RT	1							1
94	HWY 24	18+18.48		RT	1							1
94	HWY 24	20+16.79		RT	1							1
94	HWY 24	20+88.00		LT	1							1
94	HWY 24	21+81.41		LT	1							1
95	HWY 24	23+71.88		RT	1							1
95	HWY 24	24+07.65		LT	1							1
95	HWY 24	24+97.85		LT	1							1
95	HWY 24	26+47.94		RT	1							1
95	HWY 24	26+75.79		LT	1							1
95	HWY 24	28+05.89		LT	1							1
96	HWY 24	29+20.76		RT	1							1
96	HWY 24	29+32.16		LT	1							1
96	HWY 24	29+96.59	30+31.94	RT						87		1
96	HWY 24	30+08.11	30+62.19	LT						65		1
96	HWY 24	30+16.87	30+34.34	RT							38	
96	HWY 24	30+31.09		LT	1							1
96	HWY 24	30+42.76	30+65.44	RT							34	
96	HWY 24	30+54.89		RT	1							1
96	HWY 24	30+55.18		LT	1							1
96	HWY 24	30+64.05	31+01.61	RT						94		1
96	HWY 24	31+60.87	31+92.62	LT						41		1
96	HWY 24	33+00.00	33+36.89	LT						47		1
96	HWY 24	33+42.75	33+84.40	RT						42		1
96	HWY 24	33+60.73		RT	1							1
96 - 97	HWY 24	33+64.93	34+02.59	LT						55		1
97	HWY 24	35+00.00	35+26.46	RT						34		1
97	HWY 24	35+51.62	41+19.12	LT						579		6
97	HWY 24	35+56.71	37+34.42	RT						237		3
97	HWY 24	35+76.64		LT	1							1
97	HWY 24	35+84.17		RT	1							1
97	HWY 24	37+43.78	41+70.88	RT						509		6
97	HWY 24	38+07.36	38+25.86	RT							83	
98	HWY 24	40+50.70		LT	1							1
98	HWY 24	41+34.00		RT	1							1
98	HWY 24	41+40.05	42+27.48	LT						103		2
98	HWY 24	41+98.65	42+43.05	RT						49		1
98	HWY 24	42+19.68		RT	1							1
100	CEDAR AVE	204+98.95		RT	1							1
100	CEDAR AVE	205+19.79		LT	1							1
100	CEDAR AVE	206+25.51	206+36.61	RT						109		2
100	CEDAR AVE	206+40.48	206+76.99	RT						152		2
101	ASH AVE	100+10.12	101+52.20	RT						146		2
101	ASH AVE	100+19.89	101+52.11	RT						132		2
				SUBTOTAL:	27	0		0	0	2481	155	61
CITY ITEMS												
99	CEDAR AVE	199+85.00		LT	1							1
99	CEDAR AVE	200+06.69		RT	1							1
99	CEDAR AVE	200+40.81		LT	1							1
99	CEDAR AVE	200+47.22		RT	1							1
99	CEDAR AVE	202+24.80		RT	1							1
99	CEDAR AVE	202+45.12		LT	1							1
				SUBTOTAL:	6	0		0	0	0	0	6
				EROSION CONTROL CONSTRUCTION PHASE - TOTAL:	33	0		0	0	2481	155	67

TEMPORARY EROSION CONTROL - CONSTRUCTION PHASE

SHEET NO.	CENTERLINE	STA.	STA.	LOCATION	CURB INLET CHECK	ROCK DITCH CHECK	DITCH CHECK SPACING	SEDIMENT TRAP		SILT FENCE	TYPE 3B EROSION CONTROL BLANKET	SEDIMENT REMOVAL
								EXCAVATION	ROCK			
					(EA.)	(FT.)	(FT.)	(C.Y.)	(C.Y.)	(FT.)	(S.Y.)	(C.Y.)
				INITIAL PHASE - STATE ITEMS:	13	0		10	10	0	0	15
				INITIAL PHASE - CITY ITEMS:	2	80		5	5	0	0	13
				CONSTRUCTION PHASE - STATE ITEMS:	27	0		0	0	2481	155	61
				CONSTRUCTION PHASE - CITY ITEMS:	6	0		0	0	0	0	6
				TOTAL:	48	80		15	15	2481	155	95

PAVEMENT MARKING

SHEET NO.	CENTERLINE	STA.	STA.	CLASS 1 PAVEMENT MARKING PAINT (18-MIL, TYPE P BEADS)		CLASS 2 PAVEMENT MARKING PAINT (25-MIL, TYPE L BEADS)				PREFORMED THERMOPLASTIC		
				4" SW	24" SY	4" SY	6" SW	6" IW	6" SY	24" SW	24" YIELD LINE	LT ARROW
				LF	LF	LF	LF	LF	LF	LF	LF	EA
STATE ITEMS												
129	HWY 24	12+06.26	17+00.00			300	268	179	359	303		3
130	HWY 24	17+00.00	22+60.00			108	270	218	1014			1
131	HWY 24	22+60.00	28+20.00				396	212	919	280		2
132	HWY 24	28+20.00	33+80.00		59	1470	128	280	256			2
133	HWY 24	33+80.00	39+40.00			1120	82	280				
134	HWY 24	39+40.00	42+77.42		18	954		169				
136	CEDAR AVE	203+50.00	207+07.94	216		540						
137	ASH AVE	100+17.74	101+80.92			280	95			35		
			SUBTOTAL:	216	77	4772	1239	1338	2548	618	0	8
CITY ITEMS												
135	CEDAR AVE	200+33.82	203+50.00	108		422				30	8	
			SUBTOTAL:	108	0	422	0	0	0	30	8	0
			USE:	324	77	5194	2577		2548	648	8	8

SUMMARY OF QUANTITIES
SHEET 8 OF 11

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER
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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	3

COUNTY
JACKSON

JOB NO.
JKU0226

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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9400 Ward Parkway
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REV.

PIPE CULVERTS											
				GROUP A PIPE			GROUP B PIPE			CLASS 3	PIPE COLLAR TYPE A (EA.)
SHEET NO.	CENTERLINE	STA (STRUCTURE NO.)	STA (STRUCTURE NO.)	15" (FT.)	18" (FT.)	24" (FT.)	15" (FT.)	18" (FT.)	24" (FT.)	EXC.	
139	HWY 24	18+48.74 (209)	20+17.60 (208)	163.83						156.1	
139	HWY 24	20+17.60 (208)	20+86.02 (207)	94.22						89.8	
139	HWY 24	20+86.02 (207)	21+82.41 (206)		86.37					95.0	
139	HWY 24	21+82.41 (206)	24+04.49 (205)					212.09		246.3	
139	HWY 24	24+04.49 (205)	24+97.93 (204)			83.85				108.1	
139	HWY 24	24+97.93 (204)	26+72.34 (203)						165.18	223.9	
139	HWY 24	26+72.34 (203)	28+08.48 (202)			126.13				168.2	
139	HWY 24	28+08.48 (202)	29+28.33 (201)						110.45	174.3	
139	HWY 24	29+28.33 (201)	30+26.88 (EXISTING 8'X8' RCB)						94.06	269.6	
139	HWY 24	23+75.45 (305)	24+04.49 (205)	72.11						74.3	
139	HWY 24	23+92.03 (304)	26+52.45 (303)					52.92		57.1	
139	HWY 24	26+52.45 (303)	26+72.34 (203)		74.80					77.7	
139	HWY 24	28+60.94 (302)	29+24.74 (301)				59.26			61.1	
139	HWY 24	29+24.74 (301)	29+28.33 (201)		73.40					89.7	
140	HWY 24	35+79.72 (405)	35+79.92 (404)	54.00						56.7	
140	HWY 24	35+79.92 (404)	33+62.65 (403)				207.35			193.5	
140	HWY 24	33+62.65 (403)	30+50.73 (402)					300.92		318.8	
140	HWY 24	30+50.73 (402)	30+50.99 (401)			64.63				94.8	
140	HWY 24	30+50.99 (401)	30+34.73 (EXISTING 8'X8' RCB)						12.81	40.4	
140	HWY 24	12+53.73 (104)	12+53.73 (119122)	40.33						34.5	
140	HWY 24	13+01.22 (103)	12+74.94 (102)				16.44			15.7	
140	HWY 24/HUTTIG AVE	12+74.94 (102)	400+60.63 (101)				13.70			13.1	
140	HUTTIG AVE	400+60.63 (101)	400+48.88 (114106)	40.45						40.1	
140	HUTTIG AVE	400+71.77 (COLLAR)	400+60.63 (101)				6.98			7.1	1
141	CEDAR AVE	205+17.38 (506)	205+02.04 (505)		33.65					35.0	
141	CEDAR AVE	205+02.04 (505)	202+28.20 (503)		263.51					311.3	
141	CEDAR AVE	202+28.20 (503)	201+66.08 (MH-1)						56.90	72.1	
141	CEDAR AVE	201+66.08 (MH-1)	200+42.90 (501)						120.26	133.6	
141	CEDAR AVE	200+42.90 (501)	200+10.35 (115222)						38.08	47.4	
141	CEDAR AVE	202+42.21 (504)	202+28.20 (503)		33.12					35.1	
141	CEDAR AVE	200+45.70 (502)	200+42.90 (501)		30.92					39.7	
			TOTAL:	464.9	595.8	274.6	303.7	565.9	597.7	3379.9	1
			USE:	465	596	275	304	566	598	3380	1

RCB EXTENSION					
SHEET NO.	RCB	STA.	CLASS B-1 CONCRETE (CULVERTS) (CY)	REINFORCING STEEL (CULVERTS) (LBS)	CLASS 4 EXCAVATION (CY)
138	8'X8' RCB	30+30.77	41.5	6432.5	238.1
		TOTAL:	41.5	6432.5	238.1
		USE:	41.5	6430	238

SUMMARY OF QUANTITIES
SHEET 9 OF 11

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	3

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

PRECAST DROP INLET												
				TYPE T INLET			TYPE B INLET					
SHEET NO.	CENTERLINE	STA.	STRUCTURE NO.	5'X3' (FT.)	7.5'X3' (FT.)	10'X3' (FT.)	2'X2' (FT.)	MANHOLE 48" (EA)	CURVED VANE GRATE & FRAME 2'X2' (FT.)	MANHOLE FRAME & COVER (EA)	PIPE OPENING (#-SIZE)	CLASS 3 EXC. (CY)
STATE ITEMS												
138	HWY 24	30+30.83	200	12.0						1		53.3
139	HWY 24	18+48.74	209	4.7						1	1-15"	13.3
139	HWY 24	20+17.60	208	4.3						1	2-15"	12.3
139	HWY 24	20+86.02	207			4.8				1	1-15", 1-18"	20.9
139	HWY 24	21+82.41	206			4.7				1	2-18"	20.5
139	HWY 24	24+04.49	205			4.8				1	1-15", 1-18", 1-24"	21.2
139	HWY 24	24+97.93	204			5.6				1	2-24"	24.0
139	HWY 24	26+72.34	203			5.0				1	1-18", 2-24"	21.6
139	HWY 24	28+08.48	202			5.9				1	2-24"	25.2
139	HWY 24	29+28.33	201		9.6					1	1-18", 2-24"	31.5
139	HWY 24	23+75.45	305			4.9				1	1-15"	21.3
139	HWY 24	25+92.03	304	5.6						1	1-18"	15.4
139	HWY 24	26+52.45	303			4.1				1	1-18"	18.6
139	HWY 24	28+60.94	302	4.0						1	1-15"	11.6
139	HWY 24	29+24.74	301	4.6						1	1-15", 1-18"	13.1
140	HWY 24	35+79.72	405			4.2				1	1-15"	18.8
140	HWY 24	35+79.92	404			5.2				1	2-15"	22.6
140	HWY 24	33+62.65	403			4.5				1	1-15", 1-18"	20.0
140	HWY 24	30+51.72	402			5.1				1	1-18", 1-24"	22.0
140	HWY 24	30+50.99	401			13.7				1	2-24"	53.5
140	HWY 24	12+82.66	104			3.6				1	1-15"	16.7
140	HWY 24	13+01.22	103		3.7					1	1-15"	13.9
140	HWY 24	12+74.94	102				3.1		1		2-15"	5.5
140	HUTTIG AVE	400+60.63	101		4.4					1	3-15"	16.1
141	CEDAR AVE	205+17.38	506			4.4				1	1-18"	19.5
141	CEDAR AVE	205+02.04	505			4.7				1	2-18"	20.6
			SUBTOTAL:	35.1	17.6	85.1	3.1	0.0	1	25		552.9
CITY ITEMS												
141	CEDAR AVE	202+42.21	504			4.87				1	1-18"	21.3
141	CEDAR AVE	202+28.20	503			5.35				1	2-18", 1-24"	23.0
141	CEDAR AVE	201+66.08	MH1					5.35		1	2-24"	15.1
141	CEDAR AVE	200+45.70	502			5.80				1	1-18"	24.7
141	CEDAR AVE	200+42.90	501			6.45				1	1-18", 2-24"	27.0
			SUBTOTAL:	0.0	0.0	22.5	0.0	5.4	0.0	5		111.1
			TOTAL:	35.1	17.6	107.6	3.1	5.4	1.0	30.0		664.0
			USE:	35	18	108	3	5	1	30		664

WATERLINE REPLACEMENT		
DESCRIPTION	**QTY**	**UNIT**
MOBILIZATION	1	LS
SITE WORK	1	LS
REMOVE ASPHALT	1600	SF
4" CONCRETE BASE	20	CY
HOT MIX ASPHALT REPLACEMENT 2"	1600	SF
HAUL OFF ASPHALT DEMO	533	CY
ELB 6" DIP CL. 52 - UNRESTRAINED	794	LF
ELB 6" DIP CL. 52 - RESTRAINED	695	LF
ELB 8" DIP CL. 52 - UNRESTRAINED	1910	LF
ELB 8" DIP CL. 52 - RESTRAINED	1090	LF
16" STEEL PIPE - CASING	89	LF
14" STEEL PIPE - CASING	275	LF
6" MJ GATE VALVE	33	EA
8" MJ GATE VALVE	19	EA
REMOVE EXISTING FIRE HYDRANT	5	EA
FIRE HYDRANT	9	EA
BLOWOFFS	12	EA
1" AIR RELEASE VALVE	2	EA
MARKER POST	66	EA
ABANDON IN PLACE 6" LINE	2473	LF
ABANDON IN PLACE 8" LINE	1311	LF
ABANDON IN PLACE VALVE BOX	15	EA
ABANDON IN PLACE FIRE HYDRANT LINE	60	LF
CONNECTION TO EXISTING 6"	12	EA
CONNECTION TO EXISTING 8"	4	EA
SREVICE REACTIVATION	23	EA
TRENCH STABILIZATION MATERIAL	90	TON

SUMMARY OF QUANTITIES
SHEET 10 OF 11

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

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JOB NO.
JKU0226

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BRIDGE NO.

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

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)
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						REVERSE CURVE (SYMBOL LEFT)
WO1-4R	48X48	16.00						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						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						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	2	32.00				MERGE (LEFT)
WO4-1aR	48X48	16.00						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)
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						ADVISORY SPEED (PLAQUE)
WO16-2	30X24	5.00						XXX FEET (PLAQUE)
WO16-3	30X24	5.00						X MILE (PLAQUE)
WO20-1	48X48	16.00	20	320.00				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	2	32.00				RIGHT/CENTER/LEFT LANE CLOSED AHEAD
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
WO20-6a	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED
WO20-7a	48X48	16.00						FLAGGER (SYMBOL)
WO21-2	36X36	9.00						FRESH OIL
WO21-5	48X48	16.00						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 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						ROAD WORK NEXT XX MILES
GO20-2	48X24	8.00	2	16.00				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)
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						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
R4-7a	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	7	14.00				SIDEWALK CLOSED
R9-11L	24X18	3.00	2	6.00				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	6	75.00				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	2	64.00				POINT OF PRESENCE
CONST-8	48X36	12.00						WORK ZONE NO PHONE ZONE

616-10.05 CONSTRUCTION SIGNS	TOTAL
	559.00

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	2	TRUCK 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	252	CHANNELIZER (TRIM LINE)
6161030	13	TYPE III MOVEABLE BARRICADE
6161033	21	DIRECTION INDICATOR BARRICADE
6161040	2	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 WITHOUT COMM. INTERFACE- CONTRACTOR FURNISHED/RETAINED
6161099	2	CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE- CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002		TEMPORARY LONG-TERM RUMBLE STRIPS
6173600D		TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/RETAINED
6173602B		TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/COMMISSION RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION
6175010A		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

EFFECTIVE: 07-01-2024

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000875
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	3

COUNTY: JACKSON

JOB NO.: JKU0226

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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SUMMARY OF QUANTITIES
SHEET 11 OF 11

REV.

THE APPROXIMATE LOCATION OF PROPERTY LINES AS SHOWN ON THE PLANS ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISION 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.

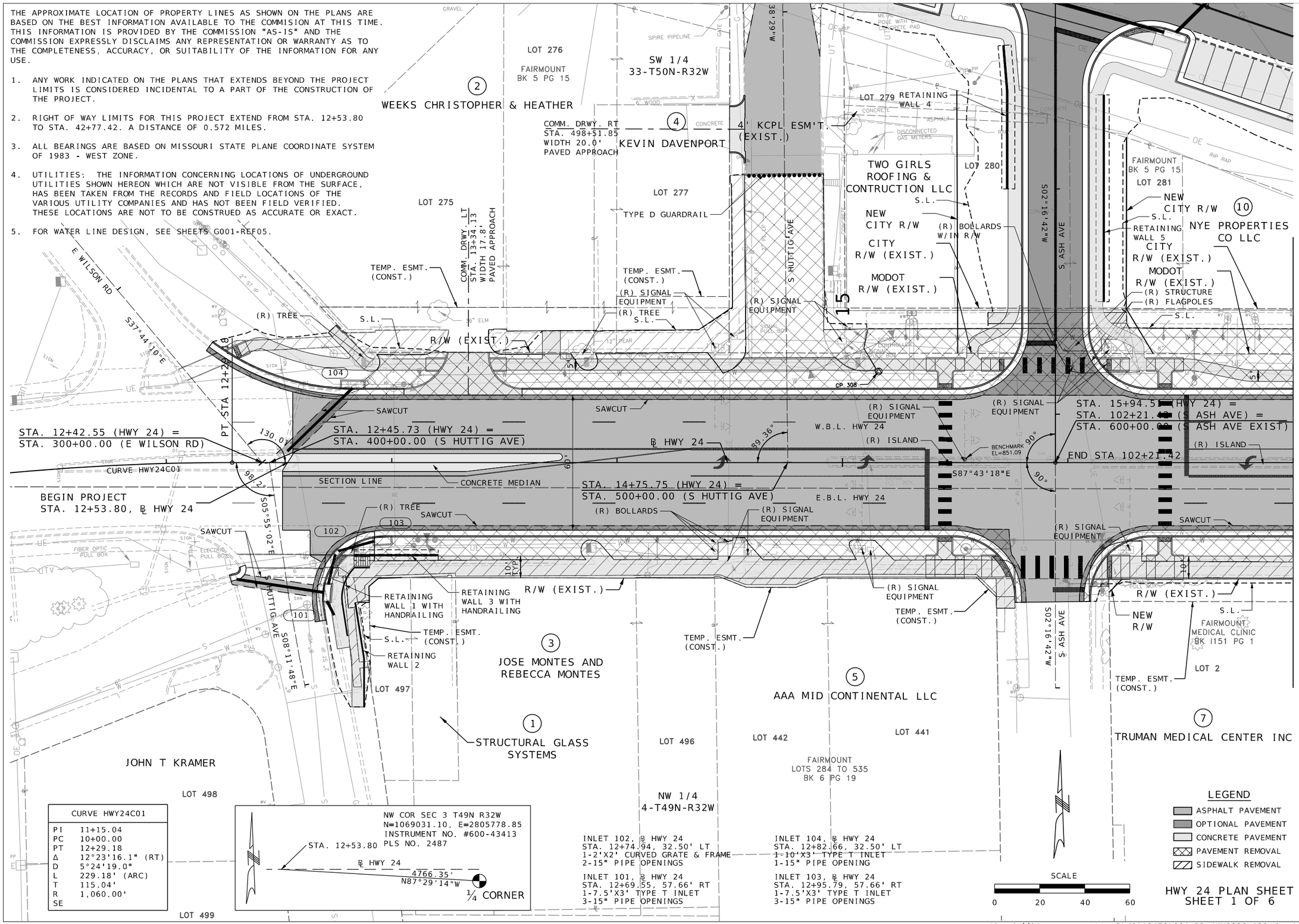
1. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO A PART OF THE CONSTRUCTION OF THE PROJECT.

2. RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND FROM STA. 12+53.80 TO STA. 42+77.42. A DISTANCE OF 0.572 MILES.

3. ALL BEARINGS ARE BASED ON MISSOURI STATE PLANE COORDINATE SYSTEM OF 1983 - WEST ZONE.

4. UTILITIES: THE INFORMATION CONCERNING LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON WHICH ARE NOT VISIBLE FROM THE SURFACE, HAS BEEN TAKEN FROM THE RECORDS AND FIELD LOCATIONS OF THE VARIOUS UTILITY COMPANIES AND HAS NOT BEEN FIELD VERIFIED. THESE LOCATIONS ARE NOT TO BE CONSTRUED AS ACCURATE OR EXACT.

5. FOR WATER LINE DESIGN, SEE SHEETS G001-REF05.



CURVE HWY24C01	
PI	11+15.04
PC	10+00.00
PT	12+29.18
Δ	12°23'16.1" (RT)
D	5°24'19.0"
L	229.18' (ARC)
T	115.04'
R	1,060.00'
SE	

HWY 24 PLAN SHEET
SHEET 1 OF 6

STATE OF MISSOURI
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JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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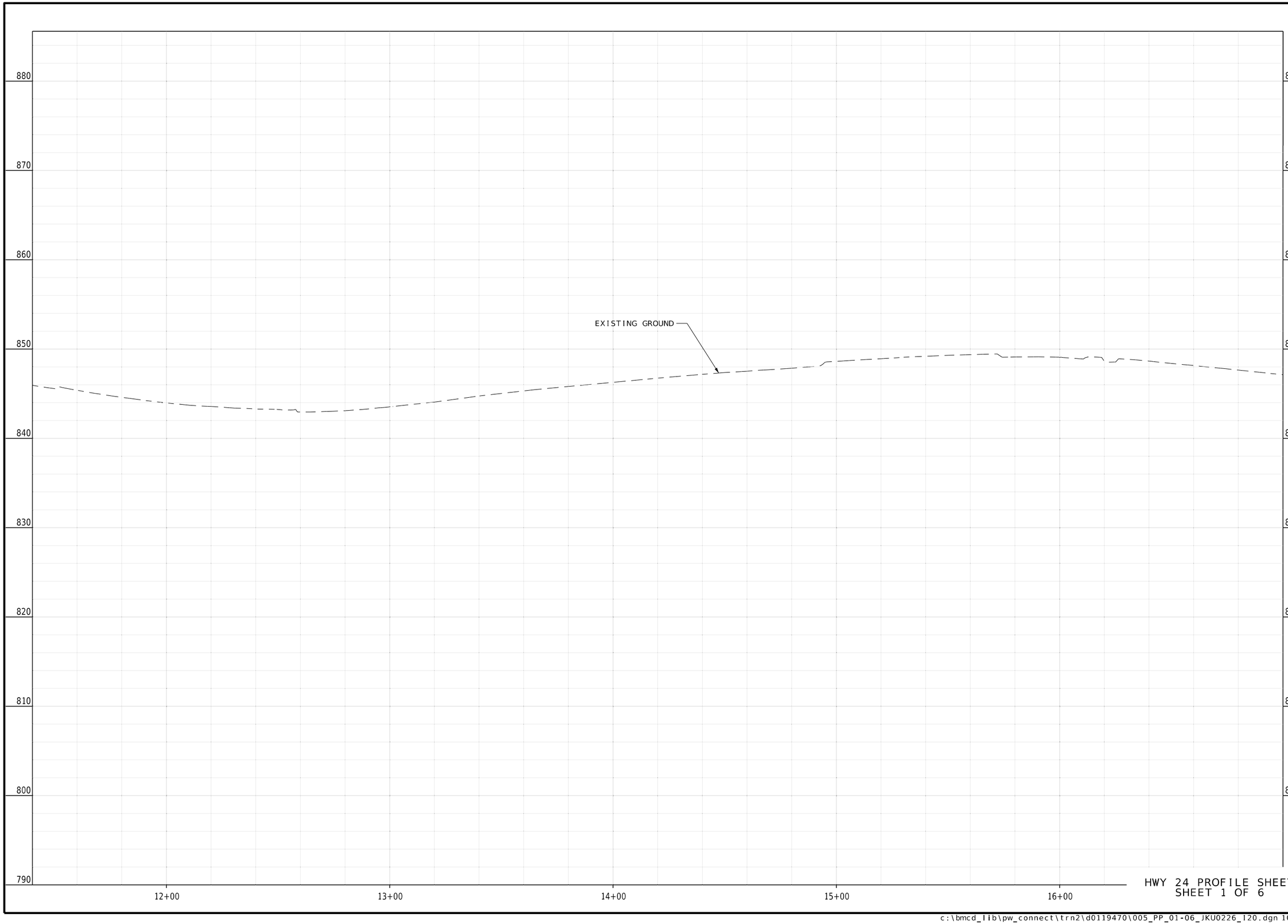

HWY 24 PROFILE SHEET
SHEET 1 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	5

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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No.: 000165

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REV.

MATCHLINE STA. 17+00.00

MATCHLINE STA. 22+60.00

PT STA 206+78.69

PC STA 206

S28°45'W

S68°55'47"E

LOT 215

SW 1/4
33-T50N-R32W

MOHSEN SATTARIN AND
NANCY MARTIN-SATTARIN

LOT 13

LOT 12

5' CHAINLINK
STONE RETAINING
WALL

BOLLARDS

3" DIA STEEL TRANSMISSION POLE

WITHOUT LIGHT

TRACT B

MOHSEN SATTARIN AND
NANCY MARTIN-SATTARIN

16
MILLER PROPERTY
HOLDINGS INC

LOT 11

COMM. DRWY - LT
STA. 19+63.33
WIDTH 26.5'
PAVED APPROACH

COMM. DRWY - LT
STA. 22+43.38
WIDTH 24.8'
PAVED APPROACH

LOT 282

CITY
R/W (EXIST.)

MODOT
R/W (EXIST.)

S. ASH AVE EXIST

S HARDY AVE

LIP EXIST. FENCE

LIP POLE

LIP EXIST. FENCE

LIP POLE

R/W (EXIST.)

20

LIP EXIST. FENCE

S.L.

CP 307

S02°26'44"W

DND TRANSMISSION POLE

R/W (EXIST.)

S.L.

(R) TREE & CURB

8" PEAR

5'

207

206

UE

(R) PAVEMENT

SAWCUT

89.2°

(R) ISLAND

W.B.L. HWY 24
(R) ISLAND

POT STA 18+93.79

℄ HWY 24

(R) ISLAND

SAWCUT

SAWCUT

SAWCUT

90°

STA. 21+35.24 (HWY 24) =
STA. 1000+00.00 (S HARDY AVE)

STA. 18+07.85 (HWY 24) =
STA. 700+00.00 (S ASH AVE EXIST)

STA. 18+93.22 (HWY 24) =
STA. 800+00.00 (S HARDY AVE)

88.81°

E.B.L. HWY 24

90°

CONCRETE MEDIAN

S87°33'16"E
SECTION LINE

60'

(R) ISLAND

STA. 20+59.26 (HWY 24) =
STA. 900+00.00 (S LAKE DR)

SAWCUT

SAWCUT

SAWCUT

(R) TREE

209

208

10'

S01°15'06"W

S02°26'44"W

+39.50
51.35'

TYPE S
CURB

+34.23
51.36'

R/W (EXIST.)

LOT 1

+19.57
50.50'

TYPE S
CURB

DND TRANSMISSION
POLE

(R) TREE

+37.90
50.50'

COMM. DRWY - RT
STA. 21+77.82
WIDTH 72.5'
PAVED APPROACH

COMM. DRWY - RT
STA. 22+58.32
WIDTH 29.8'
PAVED APPROACH

S.L.

TEMP. ESMT.
(CONST.)

LOT 1

FAIRMOUNT
MEDICAL CLINIC
BK I151 PG 1

10' GAS AND WATER ESMT
BK 801 PG 727

9
TRUMAN MEDICAL CENTER INC

10' DRIVEWAY ESMT
BK 502 PG 240

37
FAIRMOUNT REDEVELOPMENT
CORPORATION

3' KCPL ESMT
BK 444 PG 570

15' ELECTRIC ESMT

R/W (EXIST.)

(R) VEGETATION

SPRINKLER
VALVE

S HARDY AVE

S.L.

R/W (EXIST.)

LOT 372

S. LAKE DR

S.L.

KHAN M CHAUDHRY

LOT 2

11
FRANK H SUPANCIC

LOT 371

NW 1/4
4-T49N-R32W

LOT 370

LOT 1

LOT 1

INLET 209, ℄ HWY 24
STA. 18+48.74L 32.50' RT
1-5'X3' TYPE T INLET
1-15" PIPE OPENING

INLET 208, ℄ HWY 24
STA. 20+17.60, 32.51' RT
1-5'X3' TYPE T INLET
2-15" PIPE OPENINGS

INLET 207, ℄ HWY 24
STA. 20+86.02, 32.50' LT
1-10'X3' TYPE T INLET
1-15" PIPE OPENING
1-18" PIPE OPENING

INLET 206, ℄ HWY 24
STA. 21+82.41, 32.50' LT
1-10'X3' TYPE T INLET
2-18" PIPE OPENINGS

SCALE
0 20 40 60

LEGEND
- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

HWY 24 PLAN SHEET
SHEET 2 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	6

COUNTY
JACKSON

JOB NO.
JKU0226

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)

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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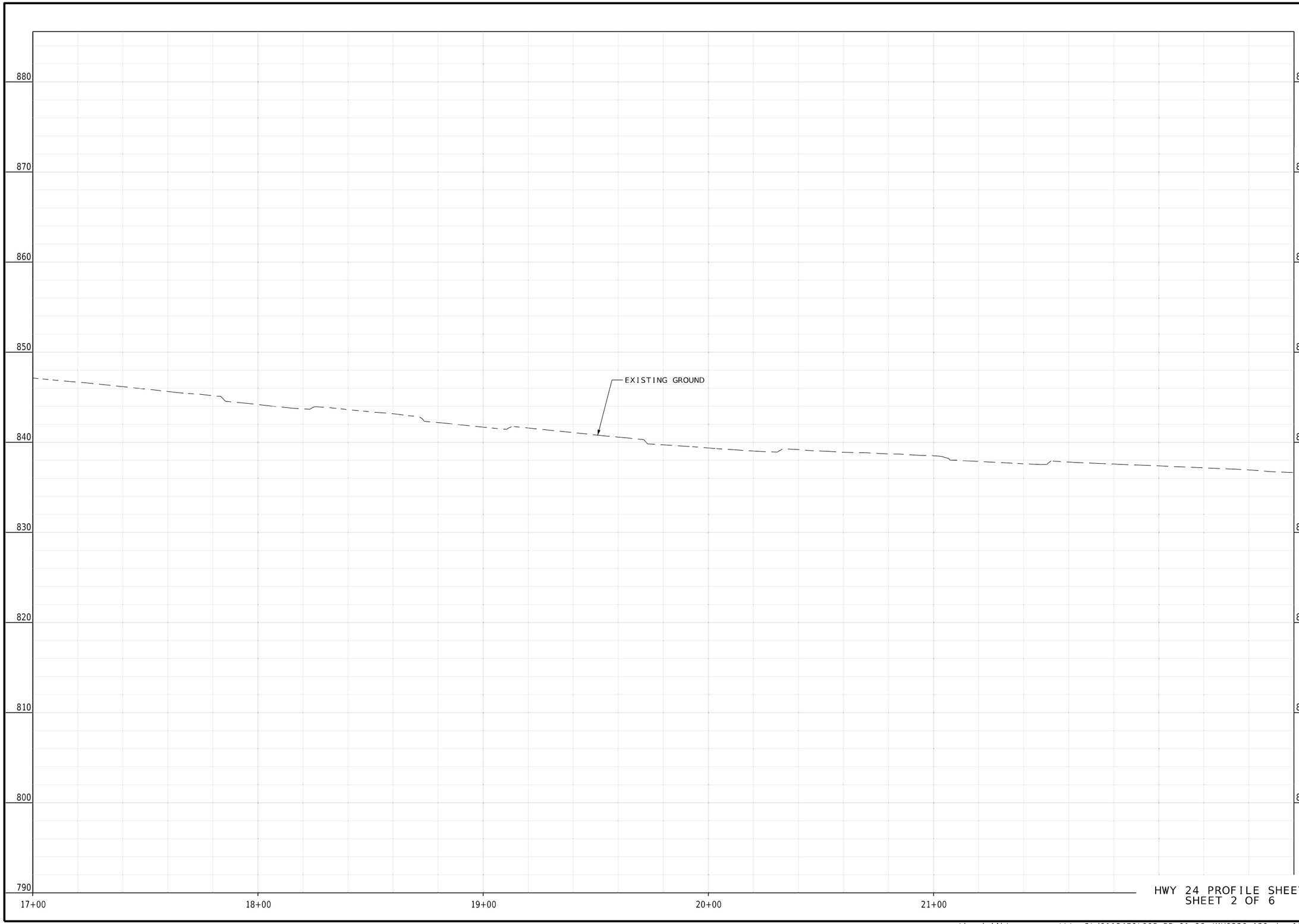

HWY 24 PROFILE SHEET
SHEET 2 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	7

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
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MATCHLINE STA. 22+60.00

MATCHLINE STA. 28+20.00

LOT 8

SW 1/4
33-T50N-R32W

INDEPENDENCE SUGAR CREEK

LOT 9

CUSENBARY HOMESTEAD
BK 8 PG 10

CITY LIMITS

18
MILLER PROPERTY HOLDINGS INC

LOT 10

R/W (EXIST.)
SUGAR CREEK/
INDEPENDENCE
CITY LIMITS

MGE UNDERGROUND GAS MARKER

S WILLOW AVE

S02°41'53"W

PC STA 24+29.00

PT STA 25+81.09

R/W (EXIST.)

TEMP. ESMT. (CONST.)

(R) VEGETATION

DND VEGETATION

COMM. DRWY. LT
STA. 26+00.22
WIDTH 40.8'
PAVED APPROACH

TEMP. ESMT. (CONST.)

NEW R/W

ATT PULL BOX

S NORTHERN BLVD

S01°47'18"W

TEMP. ESMT. (CONST.)

NEW R/W

S.L.

R/W (EXIST.)
TYPE S CURB
+98.12
48.33'

20
EXCHANGERIGHT NET LEASED
PORTFOLIO 15 LLC

SAWCUT

(R) ISLAND

STA. 23+23.86 (HWY 24) =
STA. 1100+00.00 (E 6th ST)

+92.94
30.70' LT

+99.13
36.00' LT

W.B.L. HWY 24

℄ HWY 24

STA. 27+41.75 (HWY 24) =
STA. 1300+00.00 (S NORTHERN BLVD)

92.41°

89.75°

CURVE HWY24C02

CONCRETE MEDIAN

STA. 24+51.03 (HWY 24) =
STA. 1200+00.00 (S WILLOW AVE)

SECTION LINE

E.B.L. HWY 24

S85°48'42"E

90°

S02°26'44"W

(R) VEGETATION

(R) TREE

+02.60
50.50'

TYPE S CURB
+78.73
50.50'

TEMP. ESMT. (CONST.)

E 6TH ST

S33°51'58"E

R/W (EXIST.)

S.L.

+66.19
51.34'

+19.62
50.61'

TYPE S CURB

+50.94
49.91'

+07.87
48.22'

TYPE S CURB

+37.50
47.29'

+67.26
46.34'

+70.58
47.66'

+96.56
73.67'

+00.78
71.45'

+89.72
51.26'

TYPE S CURB

R/W (EXIST.)

TEMP. ESMT. (CONST.)

S.L.

DND TRANSMISSION POLE

CONCRETE MEDIAN

LOT 7

17
PINK CAP LLC

LOT 5

LOT 3

LOT 1

LOT 12

COMM. DRWY. RT
STA. 24+46.07
WIDTH 34.8'
PAVED APPROACH

COMM. DRWY. RT
STA. 25+35.23
WIDTH 26.2'
PAVED APPROACH

COMM. DRWY. RT
STA. 26+22.42
WIDTH 24.2'
PAVED APPROACH

15
KENNETH CASEBIER

LOT 6

LOT 4

HUTCHINS PARK
BK 8 PG 80

BLOCK 1

LOT 2

21
DENNIS R WAITS
AND TERRY M WAITS

S NORTHERN BLVD

LOT 4

LOT 9

LOT 10

LOT 13

INLET 204, ℄ HWY 24
STA. 24+97.53, 32.51' LT
1-10'X3' TYPE T INLET
2-24" PIPE OPENINGS

INLET 203, ℄ HWY 24
STA. 26+72.34, 38.50' LT
1-10'X3' TYPE T INLET
1-18" PIPE OPENING
2-24" PIPE OPENINGS

INLET 202, ℄ HWY 24
STA. 28+08.48, 38.53' LT
1-10'X3' TYPE T INLET
2-24" PIPE OPENINGS

INLET 305, ℄ HWY 24
STA. 23+75.45, 32.50' RT
1-10'X3' TYPE T INLET
1-15" PIPE OPENING

INLET 205, ℄ HWY 24
STA. 24+04.49, 32.51' LT
1-10'X3' TYPE T INLET
1-15" PIPE OPENING
1-18" PIPE OPENING
1-24" PIPE OPENING

INLET 304, ℄ HWY 24
STA. 25+92.03, 32.50' RT
1-5'X3' TYPE T INLET
1-18" PIPE OPENING

INLET 303, ℄ HWY 24
STA. 26+52.45, 32.60' RT
1-10'X3' TYPE T INLET
2-18" PIPE OPENINGS

NW 1/4
4-T49N-R32W

CURVE HWY24C02	
PI	25+05.05
PC	24+29.00
PT	25+81.09
Δ	1°44'34.3" (RT)
D	1°8'45.3"
L	152.09' (ARC)
T	76.05'
R	5,000.00'
SE	

LEGEND
- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

HWY 24 PLAN SHEET
SHEET 3 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	8

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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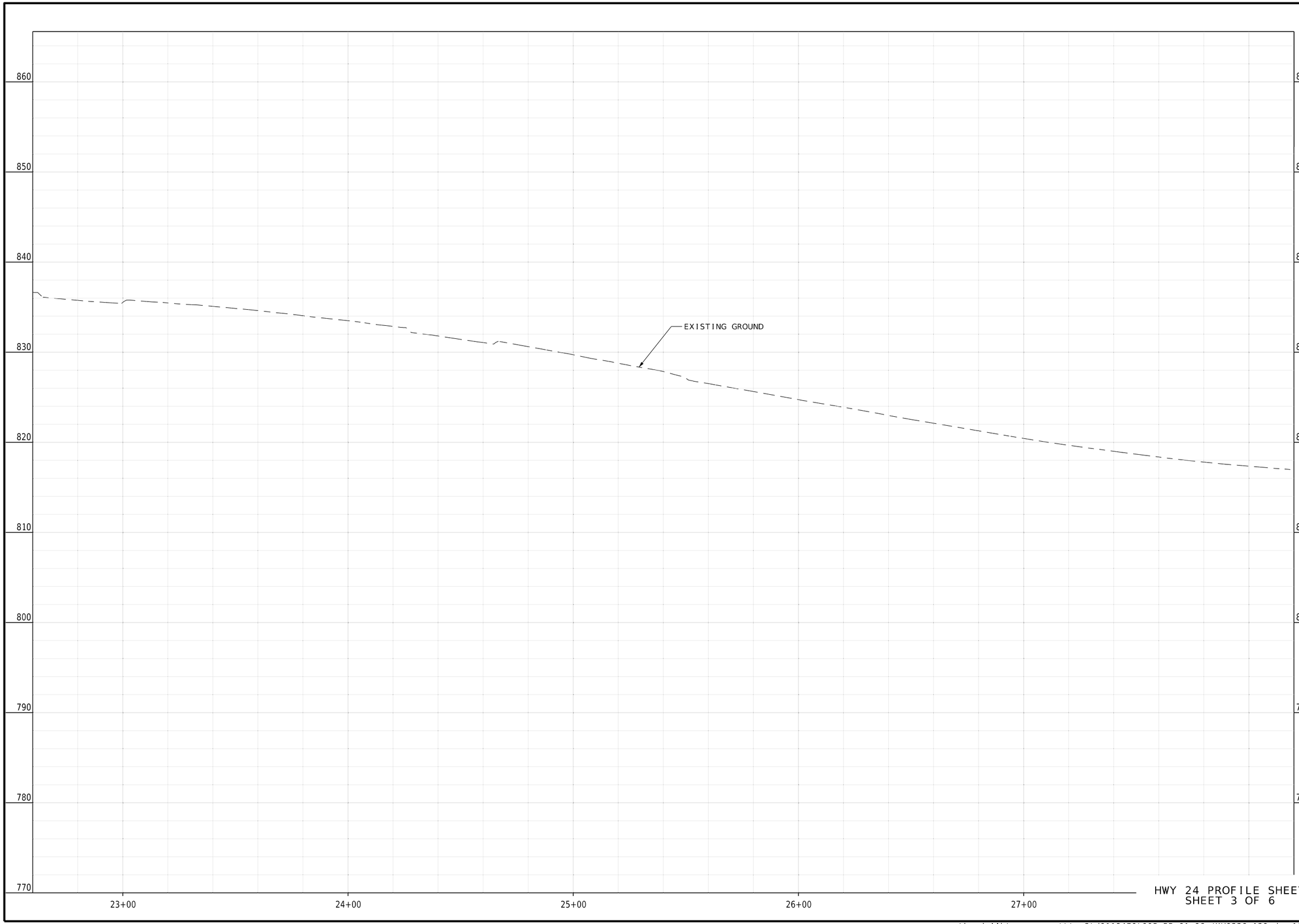

HWY 24 PROFILE SHEET
SHEET 3 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	9

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

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DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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MATCHLINE STA. 28+20.00

MATCHLINE STA. 33+80.00

22
EHSAN CHAUDHARY LLC

GRADING & DRAINAGE ESMT. (EXIST.)

COMMERCIAL SERVICES & SALES CO., LLC.

15' OIL & GAS PIPELINE ESMT. (EXIST.)

GRADING & DRAINAGE ESMT. (EXIST.)

R/W (EXIST.) SUGAR CREEK/ INDEPENDENCE CITY LIMITS

SW 1/4
33-T50N-R32W

26
NATIONAL RETAIL PROPERTIES LP

K-2 CHARITABLE FOUNDATION

TEMP. ESMT. (CONST.)

COMM. DRWY. LT STA. 28+96.47 WIDTH 39.8' PAVED APPROACH

COMM. DRWY. LT STA. 29+62.16 WIDTH 44.6' PAVED APPROACH

COMM. DRWY. LT STA. 30+97.09 WIDTH 39.8' PAVED APPROACH

COMM. DRWY. LT STA. 31+46.10 WIDTH 18.2' PAVED APPROACH

COMM. DRWY. LT STA. 32+07.56 WIDTH 18.0' PAVED APPROACH

COMM. DRWY. LT STA. 32+61.56 WIDTH 23.7' PAVED APPROACH

COMM. DRWY. LT STA. 33+50.04 WIDTH 23.5' PAVED APPROACH

(R) INLET & RETROFIT RCB

(R) POLE

56 LF TEMP. SHORING

30' GRADING AND DRAINAGE EASEMENT BK 572 PG 549

SOUTHERN STAR CENTRAL GAS PIPELINE

TYPE S CURB

S.L.

REMOVE & RELOCATE MAILBOX

+29.16 49.34'

+07.83 51.49'

+89.85 51.60'

+72.13 51.61'

+62.97 51.49'

+32.20 48.50'

+55.33 47.99'

+60.25 52.77'

+22.06 52.09'

+47.86 36.00' LT

+72.86 28.27' LT

+50.64 24.00' LT

+09.24 30.00' RT

+50.65 24.00' RT

SAWCUT

(R) INLET & PIPE

(R) INLET & PIPES

(R) BOLLARDS

PC STA 28+53.48

PT STA 30+08.95

CURVE HWY24C03

CONCRETE MEDIAN

W.B.L. HWY 24

E.B.L. HWY 24

℄ HWY 24

SECTION LINE

S87°35'35"E

15" VCP

48'

66'

10'

201

200

401

301

302

402

403

+30.14 51.90'

+72.17 50.01'

+76.41 49.88'

+17.32 48.50'

+47.09 46.24'

+66.34 49.93'

+88.85 43.00'

+97.83 43.00'

TYPE B C&G

(R) VEGETATION

DND TRANSMISSION POLE

TRANSMISSION POLE

(R) POSTS & FENCE W/IN EXIST. R/W

(R) TREE

25' B/L

10'X16' STRUCTURE ESMT. (EXIST.)

10' ELEC. OVERHANG ESM'T. (EXIST.)

LIP POSTS

5' KCPL ESM'T. (EXIST.)

TEMP. ESMT. (CONST.)

10' OIL PIPELINE ESMT. (EXIST.)

W30' X L25' X D2.5' ROCK LINING

PERM. ESMT.

LOT 11 | LOT 10 | LOT 9 | LOT 8 | LOT 7 | LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

23
BURTON STREET DOLPHINS LLC

25
THELMA JORDAN, TRUSTEE

27
AGT PROPERTY MANAGEMENT LLC

MID-CITY SUBDIVISION BK 12 PG 50

NW 1/4
4-T49N-R32W

CURVE HWY24C03	
PI	29+31.22
PC	28+53.48
PT	30+08.95
Δ	1°46'53.2" (LT)
D	1°8'45.3"
L	155.46' (ARC)
T	77.74'
R	5,000.00'
SE	

INLET 301, ℄ HWY 24
STA. 29+24.74, 33.00' RT
1-5'X3' TYPE T INLET
1-18" PIPE OPENING
1-24" PIPE OPENING

INLET 302, ℄ HWY 24
STA. 28+60.94, 32.50' RT
1-5'X3' TYPE T INLET
1-18" PIPE OPENING

INLET 200, ℄ HWY 24
STA. 30+30.83, 43.86' LT
1-5'X3' TYPE T INLET
STUB INTO EXIST. RCB

INLET 201, ℄ HWY 24
STA. 29+28.33, 39.32' LT
1-7.5'X3' TYPE T INLET
1-18" PIPE OPENING
2-24" PIPE OPENINGS

STA. 30+30.77, ℄ HWY 24
EXIST. 8' X 8' RCB
REMOVE EXIST. 1.5' RCB & END SECTION RT
EXTEND 35.3' RT W/ END SECTION

INLET 402, ℄ HWY 24
STA. 30+51.72, 31.49' RT
1-10'X3' TYPE T INLET
1-18" PIPE OPENING
1-24" PIPE OPENING

INLET 401, ℄ HWY 24
STA. 30+50.98, 32.19' LT
1-10'X3' TYPE T INLET
2-24" PIPE OPENINGS

INLET 403, ℄ HWY 24
STA. 33+62.65, 26.50' RT
1-10'X3' TYPE T INLET
1-15" PIPE OPENING
1-18" PIPE OPENING

LEGEND
- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

HWY 24 PLAN SHEET
SHEET 4 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	10

COUNTY JACKSON

JOB NO. JKU0226

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)

MoDOT

BURNS McDONNELL
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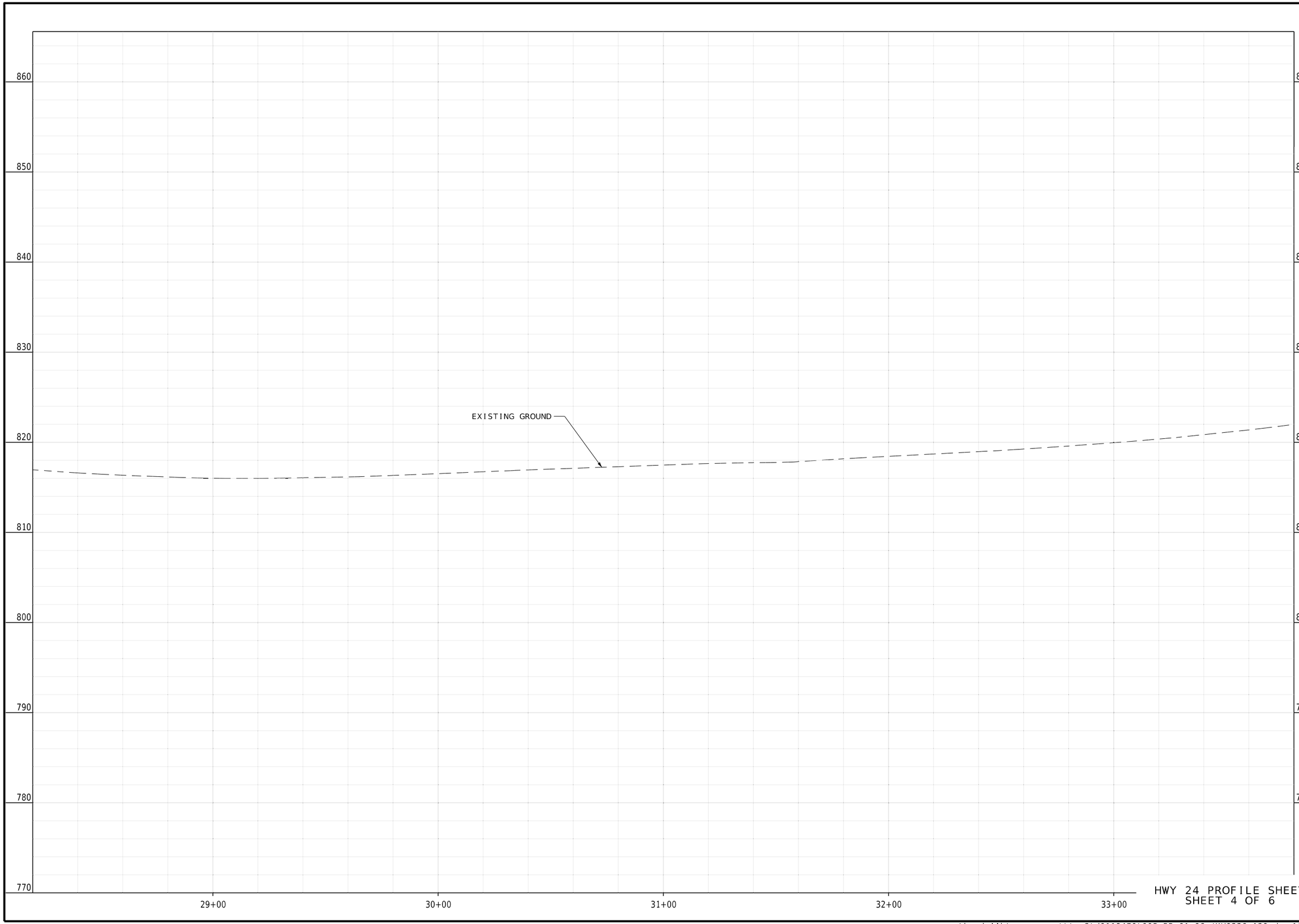

HWY 24 PROFILE SHEET
SHEET 4 OF 6

STATE OF MISSOURI
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8/4/2025

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24	MO
DISTRICT	SHEET NO.
KC	11

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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MATCHLINE STA. 33+80.00

MATCHLINE STA. 39+40.00

SW 1/4
33-T50N-R32W

SE 1/4
33-T50N-R32W

¼ SECTION LINE

CITY R/W (EXIST.)

S CARLISLE AVE

S04°11'18"W

30

FAITH ENTERPRISES INC

35

COMM. DRWY. LT
STA. 35+28.56
WIDTH 43.9'
PAVED APPROACH

32

LARRY SNYDER

R/W (EXIST.)
SUGAR CREEK/
INDEPENDENCE
CITY LIMITS

SUGAR CREEK/
INDEPENDENCE
CITY LIMITS

LOT 4

LOT 3

LOT 2

LOT 1

BILLBOARD

SMALL TREES

S.L.

(R) SIGN

SAWCUT

88.22°

POT STA 35+27.62

SOUTHWEST CORNER
SOUTHEAST QUARTER
SECTION 33-T50N-R32W

NORTHWEST CORNER
NORTHEAST QUARTER
SECTION 4-T49N-R32W

STA. 34+17.00 (HWY 24) =
STA. 1400+00.00 (S CARLISLE AVE)

SECTION LINE

℄ HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

S87°44'38"E

(R) GUARDRAIL

RETAINING
WALL 6 WITH
HANDRAILING

(R) FENCE &
RETAINING WALL

(R) TREE

(R) TREES

(R) SIGN

405

404

+80.56
47.54'

R 5'

+84.46
52.22'

DND TRANSMISSION
POLE

NEW R/W

+86.24
97.52'

R 25'

+34.40
123.22'

+76.88
128.13'

31

FAIRMOUNT MOBILE HOME PARK LLC

4 IN. CONCRETE
MEDIAN STRIP

+76.92
138.79'

+10.95
121.53' RT

+26.07
121.70' RT

R 25'

TEMP. GRAVEL DRIVE TO BE REMOVED AFTER
DRIVE CONSTRUCTION. NO DIRECT PAY.
CONTRACTOR TO SEED AFTER GRAVEL REMOVAL.

TEMP. ESMT.
(CONST.)

TEMP. ESMT.
(CONST.)

TEMP. ESMT.
(CONST.)

HOUSE
(DND)

SANITARY
CLEAN OUT

WINDOW
WELL

DUMPSTER
GATE

CONCRETE

WITH UGT

TRANSMISSION
POLE

WATER
VAULT

FLOWER
BED

10" CRABAPPLE

6" CRABAPPLE

3" PEAR

3" MAPLE

26" ASH

15"

R/W (EXIST.)

12'X8' STRUCTURE
ESMT. (EXIST.)

℄ 15' SANITARY
ESMT. (EXIST.)

10' ELEC. OVERHANG
ESM'T. (EXIST.)

29

COMMUNITY SERVICE LEAGUE OF
JACKSON COUNTY

20'X30' WATER
PIPELINE ESM'T.
(EXIST.)

5' U/E
(EXIST.)

COMM. DRWY. RT
STA. 34+00.56
WIDTH 31.2
PAVED APPROACH

COMM. DRWY. RT
STA. 35+42.40
WIDTH 24.0'
PAVED APPROACH

COMM. DRWY. RT
STA. 37+54.54
WIDTH 22.0'
PAVED APPROACH

FUTURE
EXCESS R/W

PERM. ESMT. FOR
HWY. PURPOSES

PERM.
UTILITY
ESMT.

33

JESUS JASSO

NEW R/W

NW 1/4
4-T49N-R32W

INLET 405, ℄ HWY 24
STA. 35+79.72, 26.50' LT
1-10'X3' TYPE T INLET
1-15" PIPE OPENING

INLET 404, ℄ HWY 24
STA. 35+79.92, 26.50' RT
1-10'X3' TYPE T INLET
1-15" PIPE OPENING
1-18" PIPE OPENING

LEGEND

- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

HWY 24 PLAN SHEET
SHEET 5 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	12

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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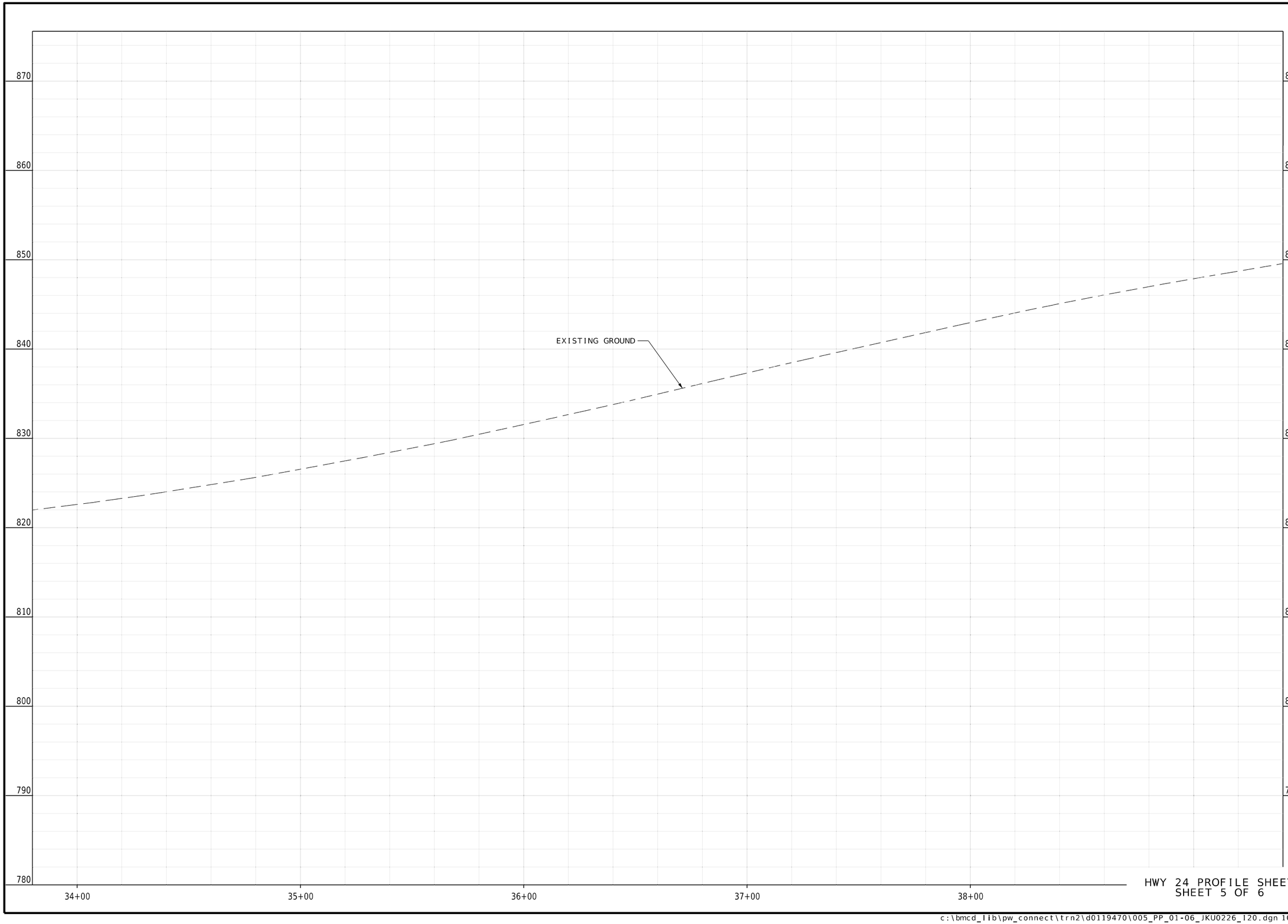

HWY 24 PROFILE SHEET
SHEET 5 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	13

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
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Certificate of Authority
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REV.

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MATCHLINE STA. 39+40.00

SE 1/4
33-T50N-R32W

APPROX. 16.5' PIPELINE R/W (EXIST.)

CITY OF SUGAR CREEK

FOUR TRAILS LANDING
BK I149 PG 10

CITY OF SUGAR CREEK

FOUR TRAILS LANDING–REPLAT
BK I188 PG 75

5' U/E
10' B/L

R/W (EXIST.)

SUGAR CREEK/ INDEPENDENCE CITY LIMITS

(R) STAIRS

(R) OUTSIDE EXIST. EOP. ABANDON & PLUG INSIDE EXIST. EOP.

RETAINING WALL 6 WITH HANDRAILING

FIELD DRWY. LT
STA. 41+53.54
WIDTH 21.1'
PAVED APPROACH

APPROXIMATE 16.5" PIPE LINE RIGHT-OF-WAY
BK 955 PG 666

LOT 1

LOT 2

LOT 2A

R/W (EXIST.)
SUGAR CREEK/ INDEPENDENCE CITY LIMITS

7.5' U/E

MGE UNDERGROUND GAS MARKER

10' U/E

40

45

SUGAR CREEK INDEPENDENCE

S.L.

CP 305

POT STA 41+57.01

SAWCUT

(R) FLUME

W.B.L. HWY 24

℄ HWY 24

SECTION LINE

E.B.L. HWY 24

SAWCUT

SAWCUT

SAWCUT

FIBER OPTIC PULL

EQ. STA. 42+77.42 (JOB NO. JKU0226) BK =
STA. 42+77.42 (JOB NO. J4S3405) AH

END PROJECT
STA. 42+77.42, ℄ HWY 24

4" PL LP (R) TREES

DND TRANSMISSION POLE

TRANSMISSION POLE

R/W (EXIST.)

S.L.

(R) OUTSIDE EXIST. EOP. ABANDON & PLUG INSIDE EXIST. EOP.

S.L.

8" PEAR

6" PEAR

8" PEAR

5" ORNAMENTAL

TRANSMISSION POLE

SWEETGUM

28" MAPLE

15" ASH

28" MAPLE

15" OAK

18" OAK

6" MAPLE

COLE CV INDEPENDENCE MO LLC

PERM. UTILITY ESMT.

22'X102' CONST. ESM'T. (EXIST.)

20' POWER & COMM. ESM'T. (EXIST.)

PERM. ESMT. FOR HWY. PURPOSES

(35)

UNITED STATES OF AMERICA

ALLIANCE FINANCE, LLC

ALGON D. GEORGE

SCOTT CLIFTON

JAMES M. BROWN

LAND TRUST OF JACKSON COUNTY MISSOURI

FAIRMOUNT HIGHLANDS
BK 7 PG 22

LOT 10

LOT 15

LOT 14

LOT 13

LOT 12

LOT 11

¼ SECTION LINE

NW 1/4
4-T49N-R32W

NE 1/4
4-T49N-R32W

LEGEND

- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

HWY 24 PLAN SHEET
SHEET 6 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	14

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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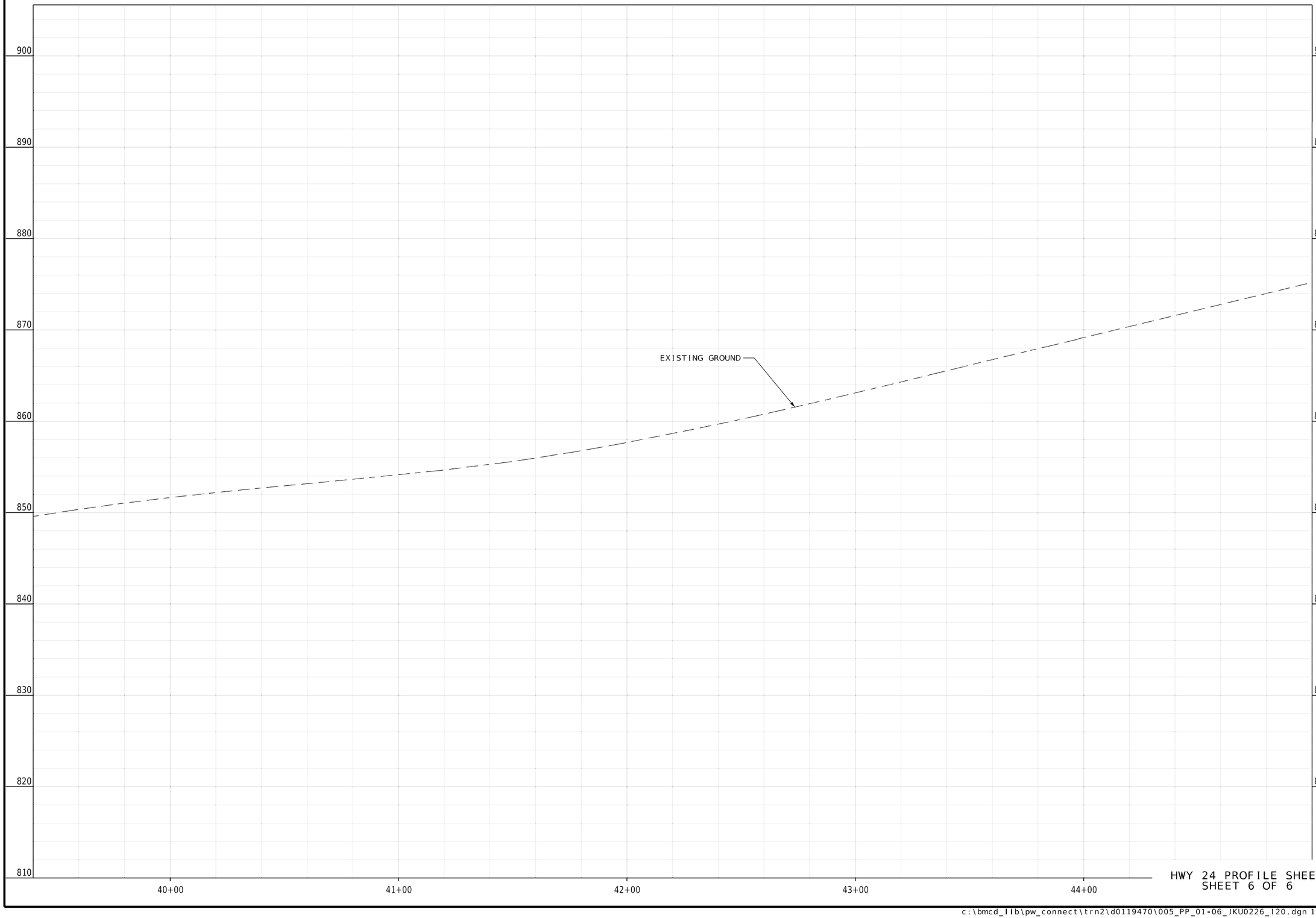

HWY 24 PROFILE SHEET
SHEET 6 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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8/4/2025

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24	MO
DISTRICT	SHEET NO.
KC	15

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

CURVE CEDC01	
PI	201+09.26
PC	200+00.00
PT	202+15.14
Δ	24°39'12.7" (LT)
D	11°27'33.0"
L	215.14' (ARC)
T	109.26'
R	500.00'
SE	

CURVE CEDC02	
PI	203+13.90
PC	203+08.15
PT	203+19.65
Δ	1°19'3.7" (LT)
D	11°27'33.0"
L	11.50' (ARC)
T	5.75'
R	500.00'
SE	

SW 1/4
33-T50N-R32W

SSMH 15183
4' DIA CONCRETE STRUCTURE
TOP EL=837.65
FL IN NW=822.7 8" CIPP
FL IN SE=822.6 8" CIPP
FL OUT W=820.1 8" CIPP SAN

1600

END STA 1600+00.00

START PC STA 200+00.00

200

BEGIN CONSTRUCTION
STA. 200+09.70, ℄ CEDAR AVE

NAGRASSUS REMAR ROBERT

36

NEWILL
TERENCE P

GARRISON DENNIS W
& LINDA K

DRESTORED HOMES LLC

START STA 496+00.00

S HUTTIG AVE

TEMP. ESMT.
(CONST.)

RES. DRWY. LT
STA. 200+72.10
WIDTH 15.0'
PAVED APPROACH

RES. DRWY. LT
STA. 201+01.89
WIDTH 15.0'
PAVED APPROACH

RES. DRWY. LT
STA. 202+13.96
WIDTH 14.0'
PAVED APPROACH

CITY R/W
(EXIST.)

PT STA 202+15.14

PC STA 203+08.15

PT STA 203+19.65

S.L.

502

501

503

504

CURVE CEDC01

℄ CEDAR AVE

(R) TREE

CURVE CEDC02

S71°05'59"E

14.06'

MH-1

18'

9'

(R) FLUME

(R) PAVEMENT

START STA 1599+00.00

CEDAR CUTOFF N51°51'14"E

MEDINA SARAI PROMOTOR

COMM. DRWY. RT
STA. 200+74.15
WIDTH 12.0'
PAVED APPROACH

MODIFIED
TYPE B C&G

CITY R/W
(EXIST.)

COMM. DRWY. RT
STA. 201+94.52
WIDTH 21.6'
PAVED APPROACH

S01°38'29"W

STA. 203+15.73 (CEDAR AVE) =
STA. 497+45.33 (S HUTTIG AVE)

INIGUEZ FELIX

WRB HOMES LLC

WRB HOMES LLC

LOT 273

LOT 274

LOT 275

LOT 276

FAIRMOUNT
BK 5 PG 15

WEEKS CHRISTOPHER & HEATHER

2

LOT 277

STA 298+50.00

INLET 501, ℄ CEDAR AVE
STA. 200+42.90, 14.50' RT
1-10'X3' TYPE T INLET
1-18" PIPE OPENING
2-24" PIPE OPENINGS

INLET 502, ℄ CEDAR AVE
STA. 200+45.70, 15.29' LT
1-10'X3' TYPE T INLET
1-18" PIPE OPENING

MANHOLE MH-1, ℄ CEDAR AVE
STA. 201+66.08, 18.63' RT
4' MANHOLE
2-24" PIPE OPENINGS

INLET 503, ℄ CEDAR AVE
STA. 202+28.20, 14.50' RT
1-10'X3' TYPE T INLET
2-18" PIPE OPENINGS
1-24" PIPE OPENING

INLET 504, ℄ CEDAR AVE
STA. 202+42.21, 14.51' LT
1-10'X3' TYPE T INLET
1-18" PIPE OPENING

LEGEND
- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

CEDAR AVE PLAN SHEET
SHEET 1 OF 2

MATCHLINE STA. 203+50.00

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	16

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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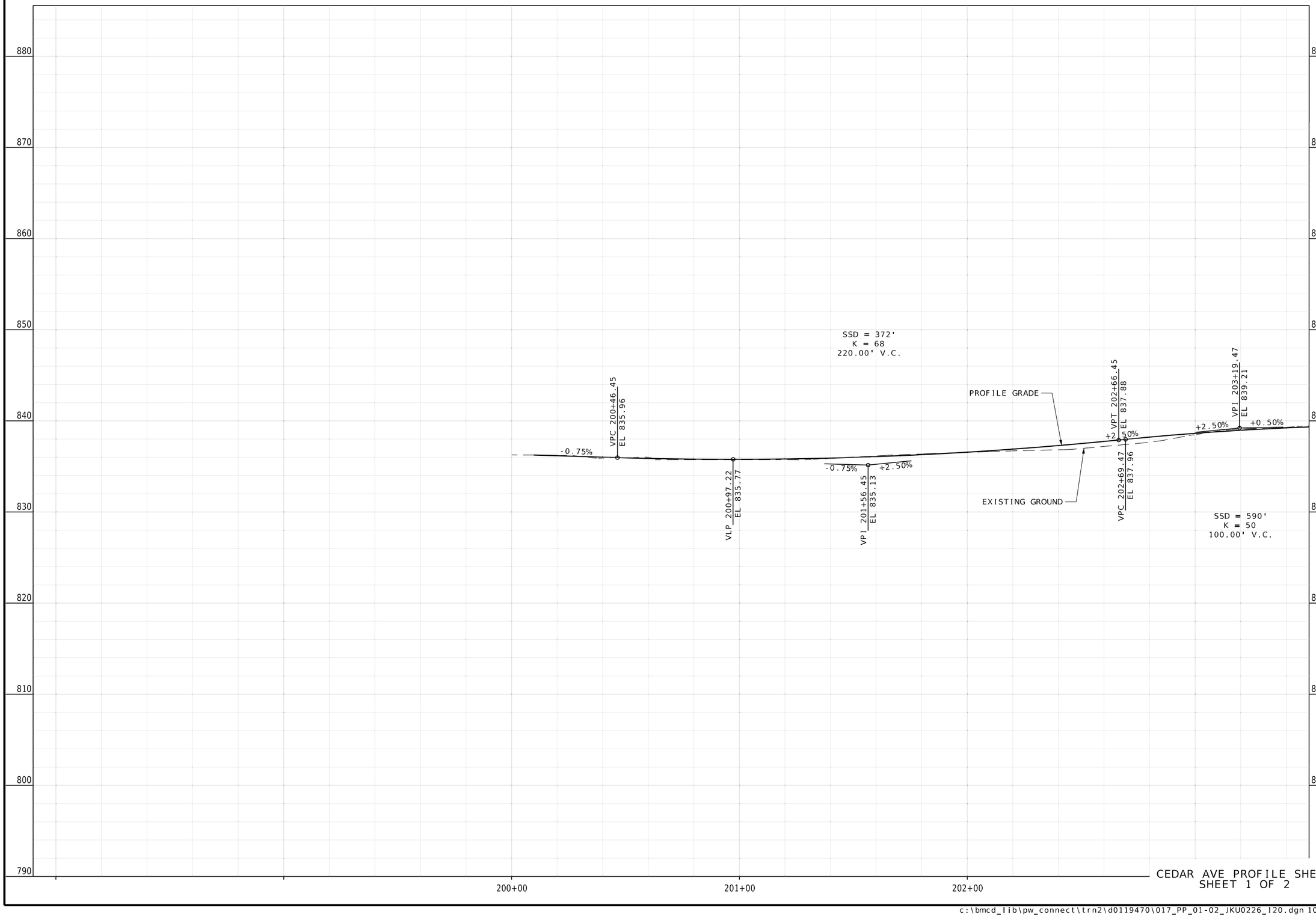

CEDAR AVE PROFILE SHEET
SHEET 1 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	17

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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REV.

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CURVE CEDC03	
PI	204+96.76
PC	204+81.54
PT	205+11.98
Δ	3°29'15.7" (RT)
D	11°27'33.0"
L	30.44' (ARC)
T	15.22'
R	500.00'
SE	

CURVE CEDC04	
PC	206+21.31
PT	206+78.69
Δ	109°35'28.2" (LT)
D	190°59'9.4"
L	57.38' (ARC)
T	42.52'
R	30.00'
SE	

INLET 505, ℄ CEDAR AVE
STA. 205+02.04, 14.51' RT
1-10'X3' TYPE T INLET
2-18" PIPE OPENINGS

INLET 505, ℄ CEDAR AVE
STA. 205+17.38, 14.50' LT
1-10'X3' TYPE T INLET
1-18" PIPE OPENING

MATCHLINE STA. 203+50.00

DURHAM MADISON

SMITH CHAD N

VANMAELE ROBERT E

SMITH ELIZABETH J

SW 1/4
33-T50N-R32W

MENDOZA MARVIN

LOT 214

BLUE HERON HOMES LLC

END CONSTRUCTION
STA. 207+07.94, ℄ CEDAR AVE

STA. 203+15.73 (CEDAR AVE) =
STA. 697+75.13 (S ASHE AVE EXIST)

END STA 207+07.94

FAIRMOUNT
BK 5 PG 15

LOT 215

PT STA 206+78.69

MOHSEN SATTARIN AND
NANCY MARTIN-SATTARIN

CITY R/W
(EXIST.)

RES. DRWY. LT
STA. 203+75.04
WIDTH 12.0'
PAVED APPROACH

RES. DRWY. LT
STA. 205+62.36
WIDTH 48.7'
PAVED APPROACH

S.L.

START STA 100+00.00

PC STA 204+81.54

PT STA 205+11.98

PC STA 206+21.31

CURVE CEDC03

CURVE CEDC04

℄ CEDAR AVE

S72°25'02"E
MODIFIED
TYPE B C&G

S68°55'47"E
MODIFIED
TYPE B C&G

(R) PAVEMENT

9'

18'

DND TRANSMISSION
POLE

CITY R/W (EXIST.)

RETAINING
WALL 4

RETAINING
WALL 5

S ASH AVE

START STA 101+00.00 (S ASHE AVE) =
STA. 204+41.78 (CEDAR AVE)

S02°16'42"W

LOT 279

LOT 280

NEW R/W

TWO GIRLS
ROOFING &
CONTRUCTION LLC

FAIRMOUNT
BK 5 PG 15
LOT 281

LOT 282

NYE PROPERTIES
CO LLC

TRACT B

R/W (EXIST.)

POT STA 698+93.79

END STA 700+00.00

START STA 700+00.00

600+00.00

700

800

505

506

LEGEND

- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

CEDAR AVE PLAN SHEET
SHEET 2 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	18

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

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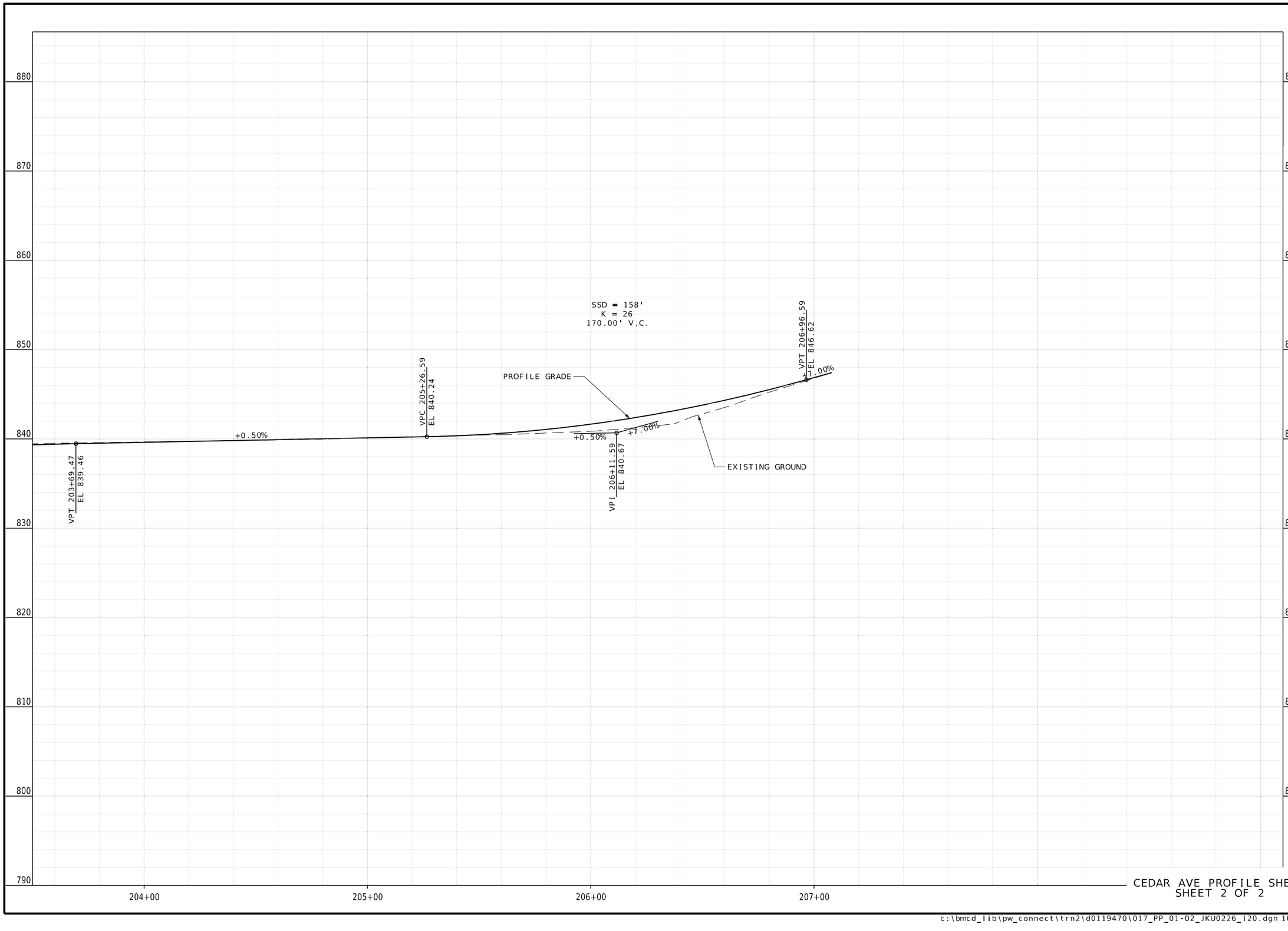

CEDAR AVE PROFILE SHEET
SHEET 2 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	19

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
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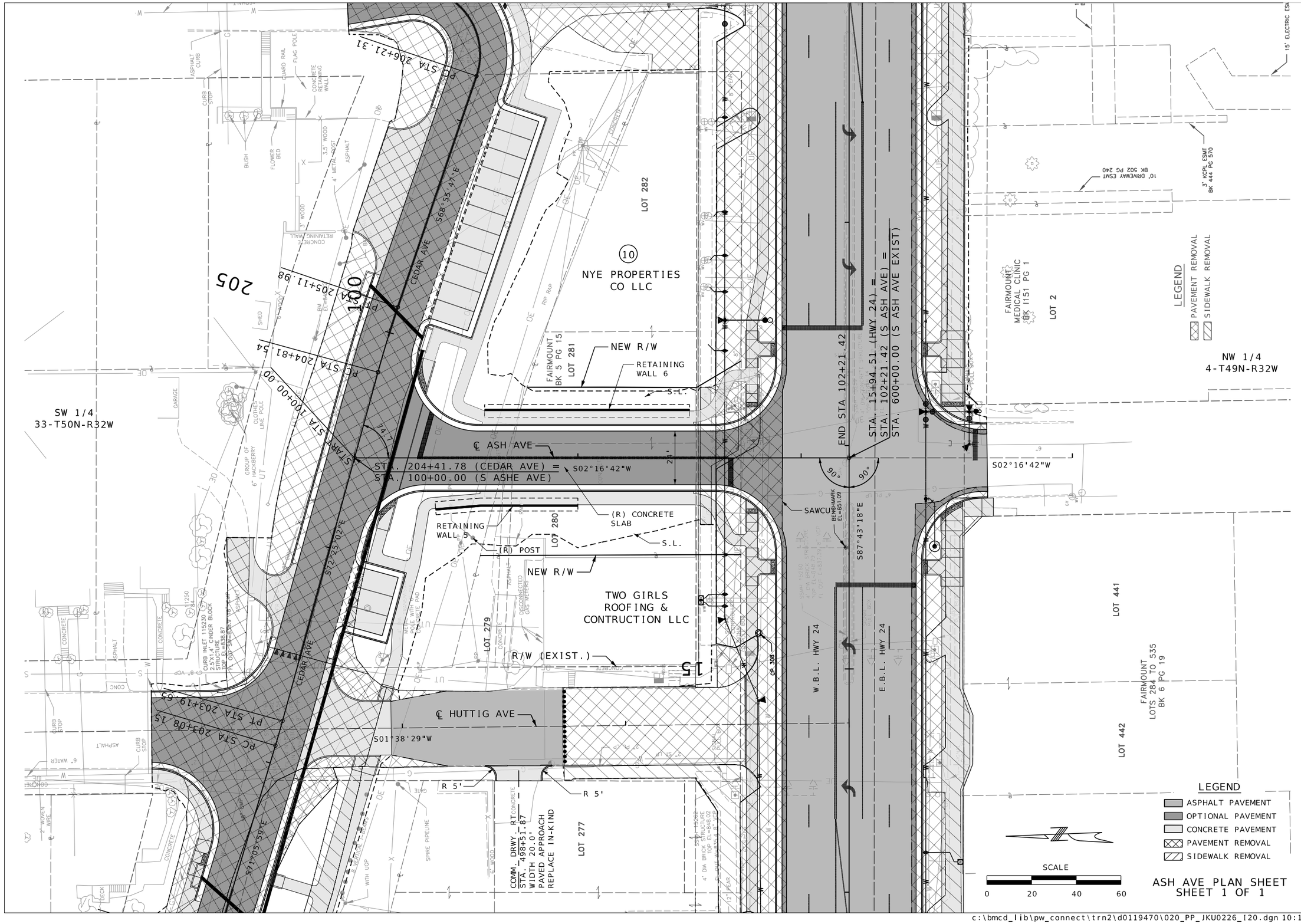

STATE OF MISSOURI
RONNIE L. WILLIAMS
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PROFESSIONAL ENGINEER

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24	MO
DISTRICT	SHEET NO.
KC	20

COUNTY
JACKSON

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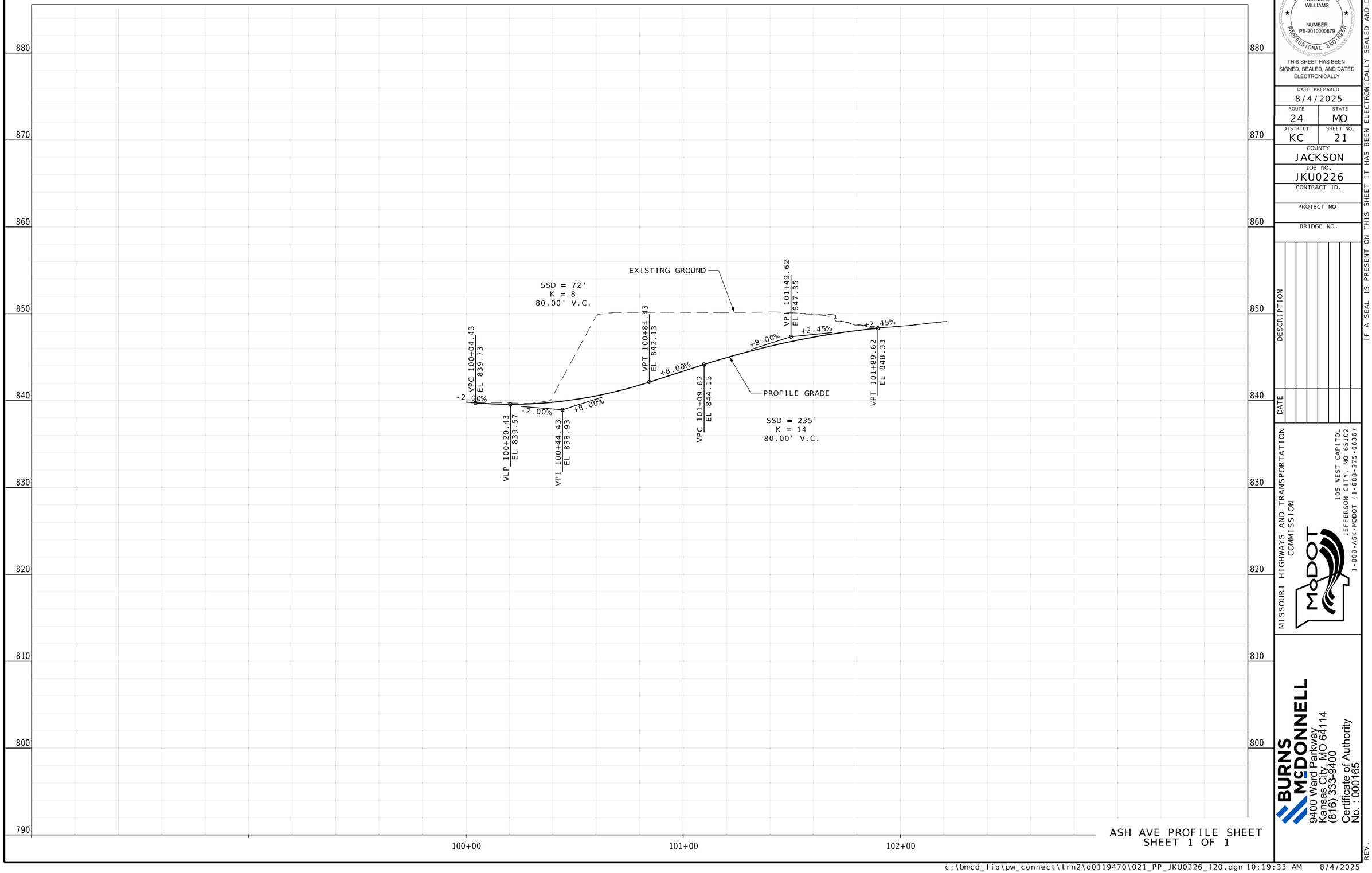

ASH AVE PROFILE SHEET
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	21

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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THE APPROXIMATE LOCATION OF PROPERTY LINES AS SHOWN ON THE PLANS ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISION 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.

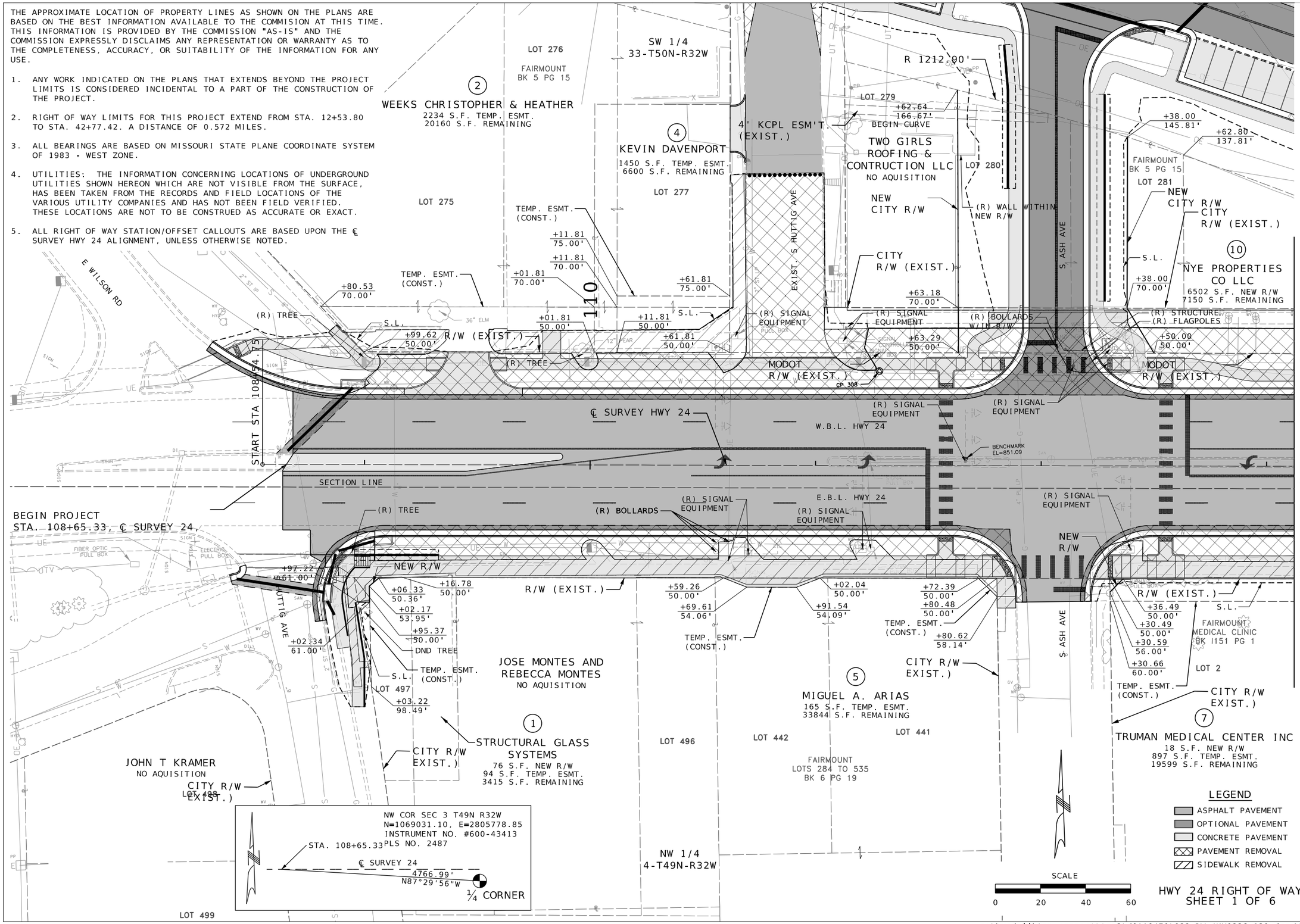
1. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO A PART OF THE CONSTRUCTION OF THE PROJECT.

2. RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND FROM STA. 12+53.80 TO STA. 42+77.42. A DISTANCE OF 0.572 MILES.

3. ALL BEARINGS ARE BASED ON MISSOURI STATE PLANE COORDINATE SYSTEM OF 1983 - WEST ZONE.

4. UTILITIES: THE INFORMATION CONCERNING LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON WHICH ARE NOT VISIBLE FROM THE SURFACE, HAS BEEN TAKEN FROM THE RECORDS AND FIELD LOCATIONS OF THE VARIOUS UTILITY COMPANIES AND HAS NOT BEEN FIELD VERIFIED. THESE LOCATIONS ARE NOT TO BE CONSTRUED AS ACCURATE OR EXACT.

5. ALL RIGHT OF WAY STATION/OFFSET CALLOUTS ARE BASED UPON THE ℄ SURVEY HWY 24 ALIGNMENT, UNLESS OTHERWISE NOTED.



MATCHLINE STA. 113+12.18

HWY 24 RIGHT OF WAY
SHEET 1 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	22

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
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(816) 333-9400
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MATCHLINE STA. 113+12.18

MATCHLINE STA. 118+72.18

LOT 215

SW 1/4
33-T50N-R32W

LOT 13

LOT 12

MOHSEN SATTARIN AND
NANCY MARTIN-SATTARIN
NO AQUISITION

MOHSEN SATTARIN AND
NANCY MARTIN-SATTARIN
NO AQUISITION

TRACT B

R 1212.90'

+79.05
92.17'
END CURVE

LOT 282

CITY
R/W LINE

MODOT
R/W LINE

S.L.

(R) TREE & CURB

LIP POLE

S ASH AVE EXIST

LIP EXIST. FENCE

LIP EXIST. FENCE

LIP POLE

115

R/W (EXIST.)

CITY R/W
EXIST.)

LIP EXIST. FENCE

S.L.

CP 307

S HARDY AVE

CITY R/W
EXIST.)

MILLER PROPERTY
HOLDINGS INC
NO AQUISITION

LOT 11

DND TRANSMISSION POLE

R/W (EXIST.)

S.L.

℄ SURVEY HWY 24

W.B.L. HWY 24

S87°37'09"E

E.B.L. HWY 24

SECTION LINE

(R) TREE

(R) TREE

+55.20
50.00'
+55.38
60.00'

+90.21
50.00'

+95.91
50.00'
+95.91
52.66'
+90.26
52.65'

R/W (EXIST.)
(R) VEGETATION

S.L.

R/W (EXIST.)

CITY R/W
EXIST.)

+20.20
50.00'

+90.39
60.00'

+20.38
60.00'

TEMP. ESMT.
(CONST.)

LOT 1

FAIRMOUNT
MEDICAL CLINIC
BK I151 PG 1

S HARDY AVE

LOT 372

CITY R/W
EXIST.)

S LAKE DR

S.L.

R/W (EXIST.)

CITY R/W
EXIST.)

LOT 1

DND TRANSMISSION
POLE

+55.07
50.00'
+55.07
55.00'

10' GAS AND WATER ESMT
BK 801 PG 727

10' DRIVEWAY ESMT
BK 502 PG 240

9

TRUMAN MEDICAL CENTER INC
365 S.F. TEMP. ESMT.
31381 S.F. REMAINING

37

FAIRMOUNT REDEVELOPMENT
CORPORATION
350 S.F. TEMP. ESMT.
3224 S.F. REMAINING

FRANK H SUPANCIC
NO AQUISITION

LOT 371

KHAN M CHAUDHRY
NO ACQUISITION

LOT 2

3' KCPL ESMT
BK 444 PG 570

15' ELECTRIC ESMT

NW 1/4
4-T49N-R32W

LOT 370

LOT 1

LOT 1

LEGEND

- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

HWY 24 RIGHT OF WAY
SHEET 2 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	23

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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REV. | DATE | DESCRIPTION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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MATCHLINE STA. 118+72.18

MATCHLINE STA. 124+26.06

LOT 8

SW 1/4
33-T50N-R32W

LOT 9

20
EXCHANGERIGHT NET LEASED
PORTFOLIO 15 LLC
465 S.F. NEW R/W
1685 S.F. TEMP. ESMT.
42044 S.F. REMAINING

CUSENBARY HOMESTEAD
BK 8 PG 10

MILLER PROPERTY
HOLDINGS INC
NO AQUISITION

LOT 10

120

S WILLOW AVE

S NORTHERN BLVD

CITY R/W EXIST.)

R/W (EXIST.)

S.L.

DND VEGETATION

(R) VEGETATION

TEMP. ESMT. (CONST.)

NEW R/W

ATT PULL BOX

MGE UNDERGROUND GAS MARKER

4" ORNAMENTAL

+75.00 61.09'
+75.00 51.09'
+16.40 61.11'
+15.96 51.11'
+28.04 71.23'
+28.10 66.24'
+15.00 72.40'
+28.41 41.12'
+05.00 58.23'
+91.37 44.38'
+82.44 72.90'
+82.66 52.90'
+87.44 72.89'
+87.55 62.89'
+87.63 55.89'
+90.66 52.89'

EQUATION:
STA 123+55.84 BK =
STA 123+50.00 AH
SHIFT 12.9 RIGHT

℄ SURVEY HWY 24

W.B.L. HWY 24

SECTION LINE

E.B.L. HWY 24

(R) TREE

R/W (EXIST.)

+74.53 - END RADIUS
50.00'
+65.87
55.00'
+66.43 - BEG. RADIUS
65.86'

+15.31 R 10'
50.00'
+19.03
55.00'

E 6TH ST

TEMP. ESMT. (CONST.)

+03.66
50.00'
+03.66
55.00'
+03.66
70.00'
+74.20
50.00'
+81.25
70.00'
+81.88
62.91'
+65.96
50.00'
+71.51
72.92'

DND TRANSMISSION POLE

BENCHMARK
ELEV. 1028.30
NAD 83

LOT 7

LOT 5

17
PINK CAP LLC
1176 S.F. TEMP. ESMT.
19368 S.F. REMAINING

LOT 6

LOT 4

HUTCHINS PARK
BK 8 PG 80
BLOCK 1

LOT 3

LOT 2

LOT 1

21
DENNIS R WAITS
AND TERRY M WAITS
1481 S.F. TEMP. ESMT.
7780 S.F. REMAINING

LOT 9

LOT 10

LOT 11

LOT 12

LOT 13

LOT 4

LOT 5

LOT 8

15
KENNETH CASEBIER
310 S.F. TEMP. ESMT.
11512 S.F. REMAINING

NW 1/4
4-T49N-R32W

LEGEND
ASPHALT PAVEMENT
OPTIONAL PAVEMENT
CONCRETE PAVEMENT
PAVEMENT REMOVAL
SIDEWALK REMOVAL

SCALE
0 20 40 60

HWY 24 RIGHT OF WAY
SHEET 3 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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24	MO
DISTRICT	SHEET NO.
KC	24

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
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No.: 000165

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MATCHLINE STA. 124+26.06

MATCHLINE STA. 129+86.15

POT STA. 129+79.95

SW 1/4
33-T50N-R32W

15' OIL & GAS PIPELINE ESMT. (EXIST.)

22
EHSAN CHAUDHARY LLC
105 S.F. NEW R/W
1758 S.F. TEMP. ESMT.
18670 S.F. REMAINING

COMMERCIAL SERVICES & SALES CO., LLC.
NO ACQUISITION

26
NNN REIT INC.
1431 S.F. TEMP. ESMT.
23169 S.F. REMAINING

28
K-2 CHARITABLE FOUNDATION
216 S.F. TEMP. ESMT.
57914 S.F. REMAINING

GRADING & DRAINAGE ESMT. (EXIST.)

GRADING & DRAINAGE ESMT. (EXIST.)

+70.69
67.78'
+70.68
62.78'
+30.08
62.83'
+30.07
52.83'
+32.80
67.69'
+32.92
52.69'
+32.75
62.43'
+32.86
52.43'
+90.00
72.35'
+90.00
62.35'
+32.96
72.29'
+33.03
52.29'
+78.00
57.10'
+77.99
52.10'
+34.86
57.15'
+34.86
52.15'

TEMP. ESMT. (CONST.)
TEMP. ESMT. (CONST.)
TEMP. ESMT. (CONST.)

(R) INLET & RETROFIT RCB

(R) POLE
(R) POLE

30' GRADING AND DRAINAGE EASEMENT BK 572 PG 549

10' GRADING AND DRAINAGE EASEMENT BK 572 PG 549

SOUTHERN STAR CENTRAL GAS PIPELINE

S.L.
S.L.
S.L.
S.L.
S.L.
S.L.
S.L.
S.L.

R/W (EXIST.)

REMOVE & RELOCATE MAILBOX

℄ SURVEY HWY 24

W.B.L. HWY 24

SECTION LINE

S87°41'46"E

E.B.L. HWY 24

(R) INLET & PIPE

(R) INLET & PIPES

LIP BOLLARDS

(R) TREE

+29.96
50.00'
+79.96
50.00'
+00.00
50.00'
+68.10
50.00'
+34.97
50.00'
+05.00
55.00'
+00.00
60.00'
+68.10
55.00'
+35.05
55.00'
+80.12
60.00'
+05.00
120.00'
+31.12
120.00'
+31.29
130.00'
+81.27
130.00'

DND TRANSMISSION POLE

TEMP. ESMT. (CONST.)

TEMP. ESMT. (CONST.)

TEMP. ESMT. (CONST.)

LIP POSTS & FENCE

10'X16' STRUCTURE ESMT. (EXIST.)

10' ELEC. OVERHANG ESM'T. (EXIST.)

LIP POSTS

5' KCPL ESM'T. (EXIST.)

25' B/L
25' B/L
25' B/L

(R) VEGETATION

PERM. ESMT.

LOT 11
LOT 10
LOT 9
LOT 8
LOT 7
LOT 6
LOT 5
LOT 4
LOT 3
LOT 2
LOT 1

MID-CITY SUBDIVISION
BK 12 PG 50

23
BURTON STREET DOLPHINS LLC
385 S.F. TEMP. ESMT.
59845 S.F. REMAINING

25
PAUL J. WRABEC CO., INC.
2138 S.F. TEMP. ESMT.
18990 S.F. REMAINING

27
AGT PROPERTY MANAGEMENT LLC
4000 S.F. PERM DRAINAGE ESMT.
200 S.F. TEMP. ESMT.
65965 S.F. REMAINING

10' OIL PIPELINE ESMT. (EXIST.)

NW 1/4
4-T49N-R32W

LEGEND
- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

HWY 24 RIGHT OF WAY
SHEET 4 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED	
8/4/2025	
ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	25
COUNTY	
JACKSON	
JOB NO.	
JKU0226	
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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
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Certificate of Authority No.: 000165

REV.

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MATCHLINE STA. 129+86.15

MATCHLINE STA. 135+46.15

SW 1/4
33-T50N-R32W

SE 1/4
33-T50N-R32W

¼ SECTION LINE

CITY R/W (EXIST.)

CITY R/W (EXIST.)

S CARLISLE AVE

FAITH ENTERPRISES INC
NO AQUISITION

LARRY SNYDER
NO AQUISITION

LOT 4 | LOT 3 | LOT 2 | LOT 1

130

135

R/W (EXIST.)

S.L.

(R) GUARDRAIL

(R) SIGN

SOUTHWEST CORNER
SOUTHEAST QUARTER
SECTION 33-T50N-R32W

NORTHWEST CORNER
NORTHEAST QUARTER
SECTION 4-T49N-R32W

℄ SURVEY HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

SECTION LINE

S87°39'39"E

POT STA. 134+71.86

(R) TREE

(R) TREES

(R) FENCE &
RETAINING WALL

FIBER OPTIC PULL BOX

DND TRANSMISSION POLE

10' ELEC. OVERHANG ESM'T. (EXIST.)

TEMP. ESMT. (CONST.)

℄ 15' SANITARY ESMT. (EXIST.)

12'X8' STRUCTURE ESMT. (EXIST.)

20'X30' WATER PIPELINE ESM'T. (EXIST.)

5' U/E (EXIST.)

NEW R/W

FUTURE EXCESS R/W

PERM. ESMT. FOR HWY. PURPOSES

PERM. UTILITY ESMT.

CONC. RETAINING WALL

BILLBOARD

+25.00 50.00'
+25.00 65.00'
+84.98 50.00'
+85.14 60.00'
+85.22 65.00'
+12.52 60.00'
+12.52 97.10'
+75.00 60.00'
+75.00 60.00'
+25.00 65.00'
+86.18 65.00'
+51.40 148.54'
+10.00 147+60
+10.00 167.46'
+05.26 181.93'
+43.42 194.42'
+48.17 195.97'
+94.31 50.00'
+90.78 60.00'
+80.21 90.00'
+96.61 127.77
+10.00
+25.00 127.72
+06.68 60.00'
+96.12 90.00'
+01.42 90.00'
+71.88 50.00'
+68.80 70.00'
+25.00 70.00'
+59.75 90.00'
+71.45 160.00'
+75.00 165.00'
+59.08 165.00'
+55.54 160.00'

(29)
COMMUNITY SERVICE LEAGUE OF JACKSON COUNTY
901 S.F. TEMP. ESMT.
46127 S.F. REMAINING

(31)
FAIRMOUNT MOBILE HOME PARK LLC
2075 S.F. NEW R/W
11641 S.F. TEMP. ESMT.
106444 S.F. REMAINING

(33)
JESUS JASSO
1113 S.F. NEW R/W
637 S.F. TEMP. ESMT.
93506 S.F. REMAINING

NW 1/4
4-T49N-R32W

LEGEND
- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE 0 20 40 60

HWY 24 RIGHT OF WAY
SHEET 5 OF 6

STATE OF MISSOURI
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24	MO
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KC	26

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MATCHLINE STA. 135+46.15

SE 1/4
33-T50N-R32W

APPROX. 16.5' PIPELINE R/W (EXIST.)

CITY OF SUGAR CREEK
NO ACQUISITION

FOUR TRAILS LANDING
BK I149 PG 10

CITY OF SUGAR CREEK
NO AQUISITION

FOUR TRAILS LANDING–REPLAT
BK I188 PG 75

APPROXIMATE 16.5' PIPE LINE RIGHT-OF-WAY
BK 955 PG 666

5' U/E
10' B/L

R/W (EXIST.)

(R) STAIRS

LOT 1

R/W (EXIST.)

LOT 2

LOT 2A

7.5' U/E

MGE UNDERGROUND GAS MARKER

10' U/E

S.L.

CP 305

℄ SURVEY HWY 24

W.B.L. HWY 24

SECTION LINE

E.B.L. HWY 24

S87°37'06"E

END PROJECT
STA. 138+83.57, ℄ SURVEY HWY 24

4" PL LP (R) TREES

DND TRANSMISSION POLE

TRANSMISSION POLE

R/W (EXIST.)

+25.00
60.40'

+25.00
50.40'

+00.00
60.00'

+00.00
80.00'

+68.69
70.00'

+58.69
80.00'

S.L.

+13.42
50.00'

+13.59
70.00'

S HARRIS AVE

20" MAPLE

15" OAK

18" OAK

28" MAPLE

24" ASH

SWEETGUM

6" PEAR

8" PEAR

5" ORNAMENTAL

15" ASH

6" MAPLE

PERM. UTILITY ESMT.

EXIST. 22'X102' CONST. ESM'T. (TO BE EXTINGUISHED)

20' POWER & COMM. ESM'T. (EXIST.)

PERM. ESMT. FOR HWY. PURPOSES

(35)

UNITED STATES OF AMERICA
4309 S.F. PERM. ESMT. FOR HWY. PURPOSES
7104 S.F. PERM. UTILITY ESMT.
182748 S.F. REMAINING

ALLIANCE FINANCE, LLC
NO AQUISITION

ALGON D. GEORGE
NO AQUISITION

SCOTT CLIFTON
NO AQUISITION

JAMES M. BROWN
NO AQUISIT

LAND TRUST OF JACKSON COUNTY MISSOURI
NO AQUISITION

COLE CV INDEPENDENCE MO LLC
NO AQUISITION

FAIRMOUNT HIGHLANDS
BK 7 PG 22

LOT 10

LOT 15 | LOT 14 | LOT 13 | LOT 12 | LOT 11

¼ SECTION LINE

NW 1/4
4-T49N-R32W

NE 1/4
4-T49N-R32W

LEGEND
- ASPHALT PAVEMENT
- OPTIONAL PAVEMENT
- CONCRETE PAVEMENT
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL

SCALE
0 20 40 60

HWY 24 RIGHT OF WAY
SHEET 6 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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24	MO
DISTRICT	SHEET NO.
KC	27

COUNTY
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CURVE CEDC01	
PI	201+09.26
PC	200+00.00
PT	202+15.14
Δ	24°39'12.7" (LT)
D	11°27'33.0"
L	215.14' (ARC)
T	109.26'
R	500.00'
SE	

CURVE CEDC02	
PI	203+13.90
PC	203+08.15
PT	203+19.65
Δ	1°19'3.7" (LT)
D	11°27'33.0"
L	11.50' (ARC)
T	5.75'
R	500.00'
SE	

SW 1/4
33-T50N-R32W

NAGRASSUS REMAR ROBERT (36)
328 S.F. TEMP. ESMT.
6185 S.F. REMAINING

NEWILL
TERENCE P
NO AQUISITION

GARRISON DENNIS W
& LINDA K
NO AQUISITION

RESTORED HOMES LLC
NO AQUISITTION

S HUTTIG AVE

REMOVE & RELOCATE
SIGN OUTSIDE S.L.

START PC STA 200+00.00

℄ CEDAR AVE
+55.00
44.85'
(R) 8 LF WALL
℄ CEDAR AVE
+55.00
34.82'

TEMP. ESMT.
(CONST.)

℄ CEDAR AVE
+90.00
47.10'

℄ CEDAR AVE
+90.00
37.08'

S.L.

BEGIN CONSTRUCTION
STA. 200+09.70, ℄ CEDAR AVE

(R) TREE

R/W (EXIST.)

PT STA 202+15.14

CURVE CEDC01

℄ CEDAR AVE

STA. 203+15.73 (CEDAR AVE) =
STA. 497+45.33 (S HUTTIG AVE)

PC STA 203+08.15

PT STA 203+19.65

CURVE CEDC02

N1°05'59"E

(R) FLUME

CEDAR CUTOFF N51°51'14"E

MEDINA SARAI PROMOTOR
NO AQUISITION

S.L.

R/W (EXIST.)

S01°38'29"W

(R) METAL POSTS

INIGUEZ FELIX
NO AQUISITION

WRB HOMES LLC
NO AQUISITION

WRB HOMES LLC
NO AQUISITION

LOT 273

LOT 274

LOT 275

LOT 276
FAIRMOUNT
BK 5 PG 15

LOT 277

WEEKS CHRISTOPHER & HEATHER (2)
SEE HWY 24 RIGHT OF WAY SHEET 1 OF 6
FOR PROPERTY AQUISITION

MATCHLINE STA. 203+50.00

LEGEND
PAVEMENT REMOVAL
SIDEWALK REMOVAL

LEGEND
ASPHALT PAVEMENT
OPTIONAL PAVEMENT
CONCRETE PAVEMENT
PAVEMENT REMOVAL
SIDEWALK REMOVAL

SCALE
0 20 40 60

CEDAR AVE RIGHT OF WAY
SHEET 1 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	28

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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CURVE CEDC03	
PI	204+96.76
PC	204+81.54
PT	205+11.98
Δ	3°29'15.7" (RT)
D	11°27'33.0"
L	30.44' (ARC)
T	15.22'
R	500.00'
SE	

CURVE CEDC04	
PC	206+21.31
PT	206+78.69
Δ	109°35'28.2" (LT)
D	190°59'9.4"
L	57.38' (ARC)
T	42.52'
R	30.00'
SE	

MATCHLINE STA. 203+50.00

DURHAM MADISON
NO AQUISITION

VANMAELE ROBERT E
NO AQUISITION

SMITH CHAD N
NO AQUISITION

205

SMITH ELIZABETH J
NO AQUISITION

SW 1/4
33-T50N-R32W

MENDOZA MARVIN
NO AQUISITION

LOT 214

BLUE HERON HOMES LLC
NO AQUISITION

END CONSTRUCTION
STA. 207+07.94, ℄ CEDAR AVE

STA. 203+15.73 (CEDAR AVE) =
STA. 697+75.13 (S ASHE AVE EXIST)

END STA 207+07.94

PT STA 206+78.69

FAIRMOUNT
BK 5 PG 15

LOT 215

12

MOHSEN SATTARIN AND
NANCY MARTIN-SATTARIN
NO AQUISITION

R/W (EXIST.)

S.L.

UT

OE

OB

START STA 100+00.00

PC STA 204+81.54

PT STA 205+11.98

PC STA 206+21.31

CURVE CEDC03

CURVE CEDC04

℄ CEDAR AVE

S72°25'02"E

S68°55'47"E

S01°08'45"W

S ASH AVE

S02°16'42"W

START STA 100+00.00 (S ASHE AVE) =
STA. 204+41.78 (CEDAR AVE)

DND TRANSMISSION
POLE

R/W (EXIST.)

℄ CEDAR AVE
+14.44
65.86'

℄ CEDAR AVE
+94.31
66.05'

(R) SIGN

FAIRMOUNT
BK 5 PG 15
LOT 281

NEW R/W

LOT 279

LOT 280

LOT 282

TWO GIRLS
ROOFING &
CONTRUCTION LLC
NO AQUISITION

10

NYE PROPERTIES
CO LLC

SEE HWY 24 RIGHT OF WAY SHEET 1 OF 6
FOR PROPERTY AQUISITION

8" PEAR

SIGNAL CONTROLLER

SIGNAL PULL BOX

15

115

20

TRACT B

POT STA 208+93.76

S87°37'09"E

102+21.42

LEGEND
ASPHALT PAVEMENT
OPTIONAL PAVEMENT
CONCRETE PAVEMENT
PAVEMENT REMOVAL
SIDEWALK REMOVAL

LEGEND
PAVEMENT REMOVAL
SIDEWALK REMOVAL

SCALE
0 20 40 60

CEDAR AVE RIGHT OF WAY
SHEET 2 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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8/4/2025

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24	MO
DISTRICT	SHEET NO.
KC	29

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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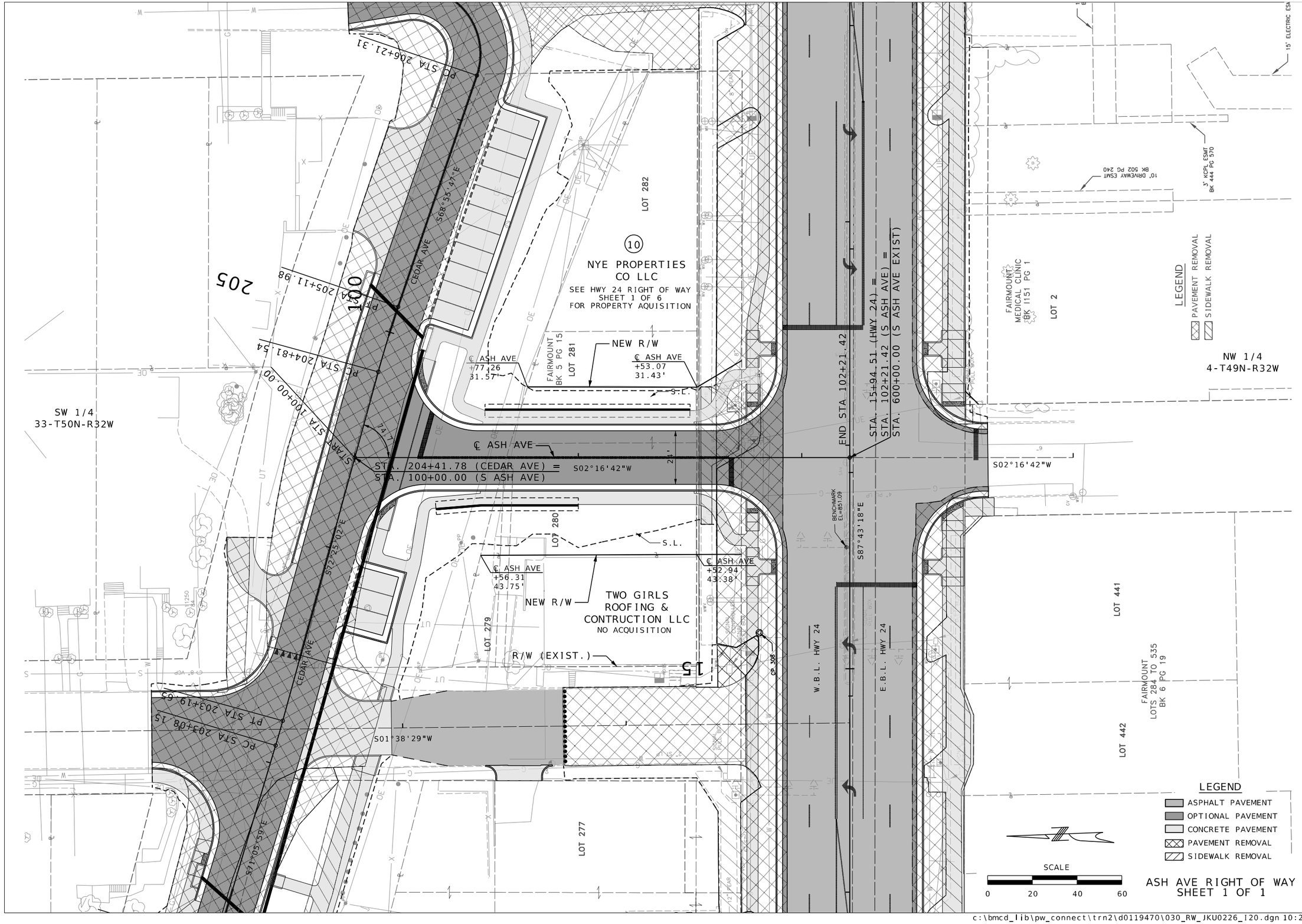
REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165



STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	30

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
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Kansas City, MO 64114
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No.: 000165

REV.

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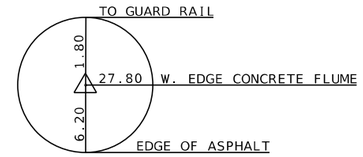
CONTROL POINTS



CP #305 MAG & SHINER
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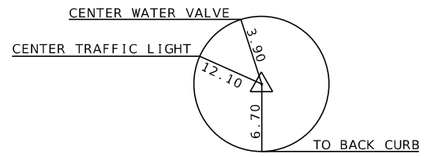
E=2803710.997
EL.=848.93



CP #306 60D NAIL
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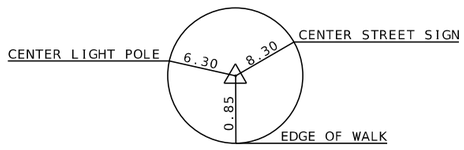
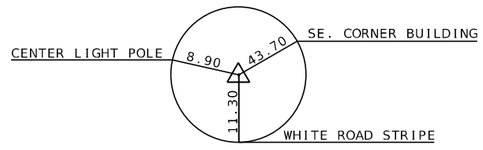
E=2802544.953
EL.=817.86



CP #307 ½" REBAR
N=1069250.064
E=2801874.078
EL.=838.07



CP #308 MAG & SHINER
N=1069270.050
E=2801280.787
EL.=848.29

BM CUT SQUARE NORTH SIDE TRAFFIC SIGNAL IN ISLAND TO ASH HEADED SOUTH OF 24 HIGHWAY. ELEVATION = 851.09

BM TWO 60D NAILS ON SOUTH FACE OF LIGHT POLE ON THE NORTH SIDE OF CEDAR AVE AND 170' WEST OF ASH. ELEVATION = 842.22

BENCH MARK INFORMATION

BEARINGS SHOWN HEREON ARE BASED ON GRID NORTH MISSOURI STATE PLANE COORDINATE SYSTEM 1983, WEST ZONE. FROM MISSOURI GEOGRAPHIC REFERENCE SYSTEM JA-53 RESET, N=328741.269M E=861729.732M, GRID FACTOR=0.9999024, DATE OF ADJUSTMENT 2003.

ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 1988. FROM MISSOURI GEOGRAPHIC REFERENCE SYSTEM JA-53 RESET, EL=953.74 FEET, DATE OF ADJUSTMENT 2003.

REFERENCE POINT SHEET
SHEET 1 OF 1

SCALE: NOT TO SCALE

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	31

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
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ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES MULTIPY THE PROJECT COORDINATES BY THE AVERAGE GRID FACTOR AS SHOWN IN THE "REFERENCE CONTROL INFORMATION" PORTION OF THIS TABLE.

PROJECT COORDINATE INFORMATION

COORDINATE SYSTEM	MO STATE PLANE 1983, WEST ZONE
HORIZONTAL DATUM	NAD 1983
VERTICAL DATUM	NAVD 1983
GEOID MODEL	GEOID 12B
ELEVATIONS DETERMINED BY	GPS
PROJECT PROJECTION FACTOR	1.0000976

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM	GPS
CONTROL STATION	GPS
DESIGNATION	GPS
CORS_ID	
PID	095053
LATITUDE	39°07'43.19365"
LONGITUDE	94°21'51.62420"
NORTHING (M)	328,741.269
EASTING (M)	861,729.732
ZONE	WEST
PROJECT AVERAGE GRID FACTOR	0.9999024

EXAMPLE OF PROJECT COORDINATE TO S.P.C.

PROJECT NORTHING X AVERAGE GRID FACTOR
= STATE PLANE NORTHING
PROJECT EASTING X AVERAGE GRID FACTOR
= STATE PLANE EASTING

EXAMPLE: CONTROL POINT #___
N _____.____ X _.________ = N _____.___
E _____.____ X _.________ = E _____.___

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
14	39+49.67	24 HWY LT	27.33	1069143.070	2803710.997	848.93	CP #305 MAG & SHINER	
8	27+86.67	24 HWY RT	43.77	1069124.327	2802544.953	817.86	CP #306 60D NAIL	
6	21+09.59	24 HWY LT	44.68	1069250.064	2801874.078	838.07	CP #307 ½" REBAR	
4	15+16.10	24 HWY LT	40.44	1069270.050	2801280.787	848.29	CP #308 MAG & SHINER	
ALIGNMENT - US 24 HWY								
OFF PLANS	10+00.00	℄		1069225.43	2800764.28		POB/PC	
OFF PLANS	11+15.04	LT	6.22	1069245.62	2800877.54		PI	
4	12+29.18	℄		1069241.05	2800992.48		PT	
6	18+93.79	℄		1069214.63	2801656.57		PI	
8	24+29.00	℄		1069191.79	2802191.29		PC	
8	25+05.05	LT	0.58	1069188.55	2802267.28		PI	
8	25+81.10	℄		1069182.99	2802343.13		PT	
10	28+53.48	℄		1069163.10	2802614.79		PC	
10	29+31.22	RT	0.60	1069157.42	2802692.32		PI	
10	30+08.95	℄		1069154.15	2802769.98		PT	
12	35+27.63	℄		1069132.37	2803288.21		PI	
14	41+57.01	℄		1069107.59	2803917.11		PI	
OFF PLANS	53+32.32	℄		1069058.75	2805091.40		PI	
OFF PLANS	67+74.29	℄		1069001.03	2806532.21		PI	
OFF PLANS	77+54.70	℄		1068952.35	2807511.41		PI	
OFF PLANS	83+02.96	℄		1068929.15	2808059.18		PI	
OFF PLANS	91+00.00	℄		1068892.43	2808855.37		PI	
OFF PLANS	92+00.00	℄		1068888.29	2808955.29		PI	
OFF PLANS	92+99.40	℄		1068883.71	2809054.58		POE	
ALIGNMENT - E WILSON RD								
4	298+50.00	℄		1069359.146	2800914.036		POB	
4	300+00.00	℄		1069240.520	2801005.840		POE	
ALIGNMENT - S HUTTIG AVE (SOUTH)								
4	400+00.00	℄		1069240.394	2801009.022		POB	
4	400+55.17	℄		1069185.522	2801014.710		PC	
4	400+65.11	RT	0.10	1069175.627	2801015.735		PI	
4	400+75.06	℄		1069165.782	2801017.153		PT	
4	401+01.24	℄		1069139.871	2801020.886		POE	
ALIGNMENT - S ASH AVE (EXISTING)								
4	600+00.00	℄		1069226.528	2801357.526		POB	
4	601+00.00	℄		1069126.607	2801353.551		POE	
ALIGNMENT - S HARDY AVE (SOUTH)								
6	800+00.00	℄		1069214.652	2801655.999		POB	
6	801+00.00	℄		1069114.676	2801653.814		POE	
ALIGNMENT - S LAKE DR								
6	900+00.00	℄		1069207.569	2801821.893		POB	
6	901+00.00	℄		1069107.660	2801817.626		POE	
ALIGNMENT - S HARDY AVE (NORTH)								
6	999+00.00	℄		1069304.236	2801902.068		POB	
6	1000+00.00	℄		1069204.327	2801897.800		POE	

COORDINATE POINT SHEET
SHEET 1 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	32

COUNTY: JACKSON
JOB NO.: JKU0226
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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

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COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
ALIGNMENT - E 6TH ST								
8	1100+00.00	℄		1069196.278	2802086.252		POB	
8	1100+37.85	℄		1069158.466	2802084.637		PC	
8	1100+54.24	RT	2.62	1069142.084	2802083.937		PI	
8	1100+69.53	℄		1069128.469	2802093.074		PT	
8	1101+00.00	℄		1069103.173	2802110.051		POE	
ALIGNMENT - S WILLOW AVE								
8	1199+00.00	℄		1069290.700	2802218.002		POB	
8	1200+00.01	℄		1069190.804	2802213.295		POE	
ALIGNMENT - S NORTHERN BLVD (SOUTH)								
8	1300+00.00	℄		1069171.768	2802496.395		POB	
8	1300+96.66	℄		1069075.365	2802489.335		PC	
8	1301+33.41	RT	3.35	1069038.711	2802486.651		PI	
8	1301+69.35	℄		1069003.498	2802497.173		PT	
8	1302+00.00	℄		1068974.134	2802505.947		POE	
ALIGNMENT - S NORTHERN BLVD (NORTH)								
8	1299+00.00	℄		1069271.253	2802505.870		POB	
8	1300+00.00	℄		1069171.302	2802502.758		POE	
ALIGNMENT - S CARLISLE AVE								
12	1399+00.00	℄		1069236.750	2803184.987		POB	
12	1400+00.00	℄		1069137.017	2803177.683		POE	
ALIGNMENT - S HARRIS AVE								
14	1500+00.00	℄		1069106.486	2803943.757		POB	
14	1501+00.00	℄		1069006.572	2803939.601		POE	
ALIGNMENT - CEDAR CUTOFF								
16	1599+00.00	℄		1069567.308	2800889.790		POB	
16	1600+00.00	℄		1069629.074	2800968.434		POE	
ALIGNMENT - CEDAR AVE								
16	200+00.00	℄		1069629.074	2800968.434		POB/PC	
16	201+09.26	RT	11.80	1069553.789	2801047.619		PI	
16	202+15.14	℄		1069518.396	2801150.990		PT	
16	203+08.15	℄		1069488.268	2801238.987		PC	
16	203+13.90	RT	0.03	1069486.405	2801244.427		PI	
16	203+19.65	℄		1069484.668	2801249.908		PT	
18	204+81.54	℄		1069435.765	2801404.232		PC	
18	204+96.76	LT	0.23	1069431.167	2801418.743		PI	
18	205+11.98	℄		1069425.694	2801432.948		PT	
18	206+21.31	℄		1069386.386	2801534.973		PC	
18	206+63.83	RT	22.04	1069371.100	2801574.651		PI	
18	206+78.69	℄		1069413.606	2801575.749		PT	
18	207+07.94	℄		1069442.842	2801576.504		POE	
ALIGNMENT - S HUTTIG AVE (NORTH)								
16	496+00.00	℄		1069631.085	2801250.319		POB	
4	500+00.00	℄		1069231.249	2801238.861		POE	
ALIGNMENT - S ASH AVE (NORTH)								
18	696+00.00	℄		1069617.913	2801581.025		POB	
6	700+00.00	℄		1069218.046	2801570.699		POE	
ALIGNMENT - S ASH AVE (PROPOSED)								
20	100+00.00	℄		1069447.776	2801366.329		POB	
20	102+21.424	℄		1069226.528	2801357.526		POE	
ALIGNMENT - ℄ SURVEY HWY 24								
22	108+54.75	℄		1069239.557	2801005.825		POB	
24	123+55.84	℄		1069177.200	2802505.619		PI - SHIFT 12.94' RT	
24	123+50.00	℄		1069164.271	2802505.081		STA. 123+55.84 BK = STA. 123+50.00 AH	
25	129+79.95	℄		1069138.947	2803134.524		PI	
26	134+71.86	℄		1069118.871	2803626.027		PI	
OFF PLANS	143+83.50	℄		1069080.985	2804536.875		POE	

COORDINATE POINT SHEET
SHEET 2 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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24	MO
DISTRICT	SHEET NO.
KC	33

COUNTY: JACKSON
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BRIDGE NO.:

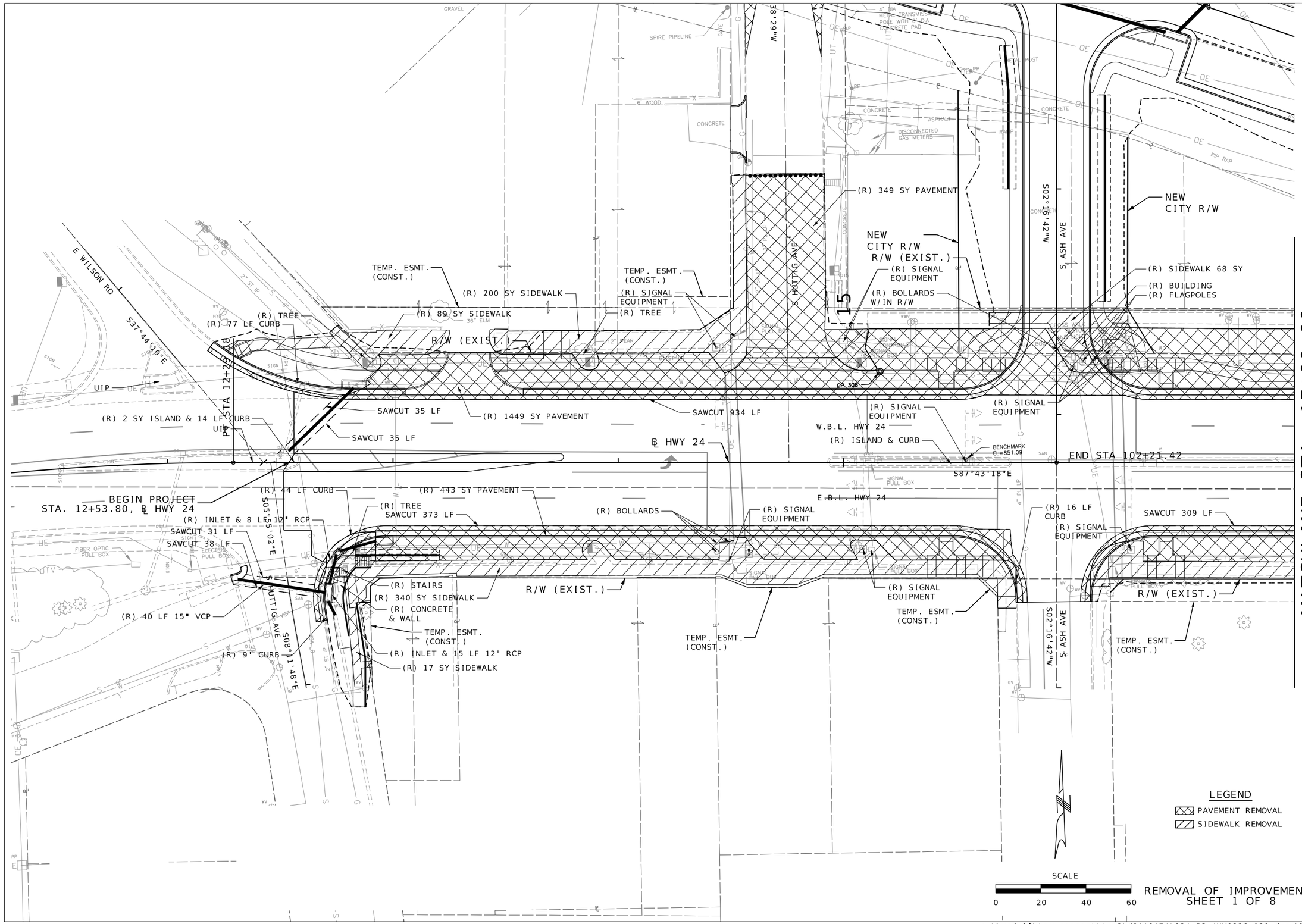
DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.



STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	34

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION	DATE	REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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MATCHLINE STA. 17+00.00

MATCHLINE STA. 22+60.00

PT STA 206+78.69

PC STA 206+28.45

S68°55'47"E

S87°33'16"E

POT STA 18+93.79

S22°26'44"W

S01°15'06"W

S02°26'44"W

S HARDY AVE

S LAKE DR

W.B.L. HWY 24

E.B.L. HWY 24

℄ HWY 24

R/W (EXIST.)

(R) TREE & CURB

(R) 348 SY PAVEMENT

(R) 158 LF CURB

(R) POLE

(R) FENCE W/IN EXIST. R/W

(R) 66 SY PAVEMENT

(R) 70 SY SIDEWALK

(R) 6 SY PAVEMENT

CP 307

(R) 73 SY PAVEMENT

(R) 3 SY PAVEMENT

DND TRANSMISSION POLE

(R) 39 SY SIDEWALK

(R) 1449 SY PAVEMENT

SAWCUT 934 LF

(R) ISLAND & CURB

(R) 63 SY SIDEWALK

SAWCUT 79 LF

SAWCUT 81 LF

SAWCUT 35 LF

SAWCUT 48 LF

SAWCUT 335 LF

(R) 103 LF CURB

(R) 426 SY PAVEMENT

SAWCUT 309 LF

SAWCUT 41 LF

SAWCUT 34 LF

SAWCUT 203 LF

(R) TREE

(R) 119 LF CURB

(R) 147 SY PAVEMENT

(R) 161 SY PAVEMENT

SAWCUT 287 LF

(R) 84 LF CURB

(R) 262 SY SIDEWALK

(R) VEGETATION

(R) 277 SY PAVEMENT

(R) 78 SY SIDEWALK

(R) 11 LF CURB

(R) 44 SY SIDEWALK

(R) 15 SY SIDEWALK

TEMP. ESMT. (CONST.)

10' GAS AND WATER ESMT BK 801 PG 727

10' DRIVEWAY ESMT BK 502 PG 240

3' KCPL ESMT BK 444 PG 570

15' ELECTRIC ESMT

LEGEND

PAVEMENT REMOVAL

SIDEWALK REMOVAL

SCALE

0 20 40 60

REMOVAL OF IMPROVEMENTS
SHEET 2 OF 8

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	35

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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REV. | DATE | DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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BURNS McDONNELL
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No.: 000165

MATCHLINE STA. 22+60.00

MATCHLINE STA. 28+20.00

R/W (EXIST.)
SUGAR CREEK/
INDEPENDENCE
CITY LIMITS

MGE UNDERGROUND GAS MARKER

S.WILLOW AVE

S02°14'53"W

PC STA 24+29.00

R/W (EXIST.)

TEMP. ESMT. (CONST.)

(R) 15 SY PAVEMENT

(R) 60 SY SIDEWALK

(R) VEGETATION

(R) 148 SY PAVEMENT

TEMP. ESMT. (CONST.)

(R) 152 LF CURB

ATT PULL BOX

S10°47'00"W

PT STA 27+90.00

(R) 68 SY SIDEWALK

S NORTHERN BLVD

TEMP. ESMT. (CONST.)

(R) 98 SY PAVEMENT

SPIRE UNDERGROUND GAS MARKER

ELECTRIC

(R) 89 SY SIDEWALK

(R) 195 LF CURB

SAWCUT 335 LF

(R) 41 SY PAVEMENT

SAWCUT 31 LF

SAWCUT 54 LF

(R) ISLAND & CURB

(R) 139 LF CURB

SAWCUT 313 LF

SAWCUT 61 LF

SAWCUT 38 LF

SAWCUT 41 LF

(R) 61 LF CURB

SAWCUT 707 LF

(R) 36 SY PAVEMENT

(R) 82 SY PAVEMENT

(R) ISLAND & CURB

℄ HWY 24

W.B.L. HWY 24

SAWCUT 61 LF

S85°48'42"E

(R) 72 SY PAVEMENT

S02°26'44"W

(R) 69 LF CURB

SAWCUT 287 LF

SAWCUT 61 LF

SAWCUT 61 LF

(R) 119 LF CURB

(R) 171 SY PAVEMENT

SAWCUT 403 LF

(R) VEGETATION

(R) 124 LF CURB

(R) 67 SY PAVEMENT

E.B.L. HWY 24

(R) 142 LF CURB

(R) 89 SY PAVEMENT

(R) 174 LF CURB

(R) 77 LF CURB

SAWCUT 1540 LF

(R) 24 SY PAVEMENT

(R) 85 SY STAMPED CONCRETE

S05°11'18"W

(R) 46 SY SIDEWALK & CURB RAMP

R/W (EXIST.)

(R) TREE

(R) 27 SY SIDEWALK

(R) 32 SY SIDEWALK

(R) 9 SY SIDEWALK & RAMP CURB

TEMP. ESMT. (CONST.)

TEMP. ESMT. (CONST.)

(R) 92 SY PAVEMENT

(R) FENCE? MODOT TO DECIDE

TEMP. ESMT. (CONST.)

(R) 27 SY SIDEWALK & CURB RAMP

(R) 19 SY SIDEWALK & CURB RAMP

DND TRANSMISSION POLE

R/W (EXIST.)

TEMP. ESMT. (CONST.)

E 6TH ST

S33°51'58"E

S NORTHERN BLVD

S16

LEGEND

PAVEMENT REMOVAL

SIDEWALK

SCALE

0 20 40 60

REMOVAL OF IMPROVEMENTS
SHEET 3 OF 8

STATE OF MISSOURI
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24	MO
DISTRICT	SHEET NO.
KC	36

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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No.: 000165

MATCHLINE STA. 28+20.00

MATCHLINE STA. 33+80.00

(R) 333 SY PAVEMENT

TEMP. ESMT. (CONST.)

R/W (EXIST.) SUGAR CREEK/ INDEPENDENCE CITY LIMITS

(R) INLET & RECONSTRUCT RCB TOP

(R) 46 LF CURB

(R) 137 LF CURB

(R) POLE

10' GRADING AND DRAINAGE EASEMENT BK 572 PG 549

30' GRADING AND DRAINAGE EASEMENT BK 572 PG 549

SOUTHERN STAR CENTRAL GAS PIPELINE

MARKER

TEMP. ESMT. (CONST.)

(R) 18 LF CURB

(R) 15 LF CURB

(R) 11 LF CURB

(R) 22 LF CURB

(R) 13 LF CURB REMOVE & RELOCATE MAILBOX

(R) 14 LF CURB

(R) 17 LF CURB

TEMP. ESMT. (CONST.)

(R) 15 LF CURB

(R) 125 LF CURB

SAWCUT 52 LF

SAWCUT 52 LF

(R) INLET & PIPE

(R) 48 SY PAVEMENT

SAWCUT 767 LF

W.B.L. HWY 24

SAWCUT 49 LF

(R) POLE

(R) 630 SY PAVEMENT

℄ HWY 24

PC STA 28+93.78

PT STA 30+83.95

E.B.L. HWY 24

(R) 322 SY PAVEMENT

(R) 6 SY SIDEWALK

(R) INLET & PIPE

SAWCUT 1540 LF

SAWCUT 49 LF

(R) 118 LF CURB

(R) INLET & PIPES

(R) BOLLARDS

(R) 182 LF CURB

S87°35'35"E

(R) 103 SY PAVEMENT

(R) 95 SY PAVEMENT

(R) 70 LF CURB

(R) 81 SY SIDEWALK

(R) TREE

4" PEAR

(R) 43 SY SIDEWALK

(R) 24 SY SIDEWALK

(R) 66 LF CURB

R/W (EXIST.)

(R) 91 LF CURB

(R) 136 SY PAVEMENT

(R) 17 SY SIDEWALK

TEMP. ESMT. (CONST.)

(R) VEGETATION

DND TRANSMISSION POLE

TRANSMISSION POLE

(R) FENCE? MODOT TO DECIDE

TEMP. ESMT. (CONST.)

PERM. ESMT.

25' B/L

25' B/L

25' B/L

15" VCP

8" VCP

6" VCP

LEGEND

PAVEMENT REMOVAL

SIDEWALK REMOVAL

SCALE

0 20 40 60

REMOVAL OF IMPROVEMENTS
SHEET 4 OF 8

STATE OF MISSOURI
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NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	37

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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MATCHLINE STA. 33+80.00

MATCHLINE STA. 39+40.00

CITY R/W (EXIST.)

S CARLISLE AVE

S04°01'18"W

(R) 6 SY PAVEMENT

(R) 574 SY PAVEMENT

(R) 81 LF CURB

R/W (EXIST.)
SUGAR CREEK/
INDEPENDENCE
CITY LIMITS

POT STA 35+27.62

(R) 460 LF GUARDRAIL

(R) SIGN

SAWCUT 707 LF

SAWCUT 44 LF

SAWCUT 785 LF

SOUTHWEST CORNER
SOUTHEAST QUARTER
SECTION 33-T50N-R32W

℄ HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

(R) 78 SY SIDEWALK

NORTHWEST CORNER
NORTHEAST QUARTER
SECTION 4-T49N-R32W

(R) 180 LF CURB

SAWCUT 44 LF

(R) 376 SY SIDEWALK

SAWCUT 1540 LF

(R) FENCE &
RETAINING WALL

S87°44'38"E
(R) 609 LF CURB

(R) TREE

(R) TREES

(R) SIGN

(R) SIGN

(R) SIGN

(R) TREE

(R) TREE

R/W (EXIST.)

(R) 99 SY PAVEMENT

(R) 36 LF CURB

DND TRANSMISSION
POLE

(R) 786 SY PAVEMENT

TEMP. ESMT.
(CONST.)

NEW R/W

HOUSE
(DND)

DND WALL

(R) LANDSCAPING

NEW R/W

CONC RETAINING WALL

SAWCUT 68 LF

(R) 785 SY PAVEMENT

TEMP. ESMT.
(CONST.)

SAWCUT 32 LF

NEW R/W

LEGEND

PAVEMENT REMOVAL

SIDEWALK REMOVAL

SCALE

0 20 40 60

REMOVAL OF IMPROVEMENTS
SHEET 5 OF 8

STATE OF MISSOURI
RONNIE L. WILLIAMS
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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	38

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

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MATCHLINE STA. 39+40.00

40

45

R/W (EXIST.)

5' U/E

10' B/L

APPROXIMATE 16.5' PIPE LINE RIGHT-OF-WAY BK 955 PG 666

7.5' U/E

(R) STAIRS

(R) OUTSIDE EXIST. EOP. ABANDON & PLUG INSIDE EXIST. EOP.

R/W (EXIST.) SUGAR CREEK/ INDEPENDENCE CITY LIMITS

MGE UNDERGROUND GAS MARKER

10' U/E

(R) 69 SY SIDEWALK

(R) 43 SY SIDEWALK

(R) FLUME

CP 305

POT STA 41+57.01

(R) 31 SY PAVEMENT

SAWCUT 785 LF

W.B.L. HWY 24

℄ HWY 24

(R) FLUME

(R) 81 SY PAVEMENT

(R) 63 LF CURB

E.B.L. HWY 24

SAWCUT 1540 LF

FIBER OPTIC PULL BOX

4" PL LP

(R) TREE

DND TRANSMISSION POLE

TRANSMISSION POLE

R/W (EXIST.)

8" PEAR

(R) 19 SY SIDEWALK

6" PEAR

8" PEAR

5" ORNAMENTAL

TRANSMISSION POLE

SWEETGUM

20" MAPLE

15" OAK

15" ASH

6" MAPLE

28" MAPLE

24" ASH

28" MAPLE

18" OAK

NEW R/W

(R) OUTSIDE EXIST. EOP. ABANDON & PLUG INSIDE EXIST. EOP.

NEW R/W

(R) 95 SY SIDEWALK

LEGEND

PAVEMENT REMOVAL

SIDEWALK REMOVAL

SCALE

0 20 40 60

REMOVAL OF IMPROVEMENTS
SHEET 6 OF 8

STATE OF MISSOURI
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PROFESSIONAL ENGINEER

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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	39

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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SW 1/4
33-T50N-R32W

START PC STA 200+00.00

BEGIN CONSTRUCTION
STA. 200+09.70, ℄ CEDAR AVE

(R) 33 SY PAVEMENT
TEMP. ESMT. (CONST.)
(R) 8 LF WALL
(R) 1359 SY PAVEMENT
(R) 14 SY PAVEMENT
(R) TREE
(R) 35 LF CURB
(R) FLUME
(R) 72 SY SIDEWALK
(R) 47 SY PAVEMENT
(R) 114 SY SIDEWALK
(R) 347 SY PAVEMENT
(R) 114 SY SIDEWALK
(R) METAL POSTS
(R) 349 SY PAVEMENT

CITY R/W (EXIST.)
CITY R/W (EXIST.)
REMOVE & RELOCATE SIGN OUTSIDE S.L.

PT STA 202+15.14
PC STA 203+08.15
PT STA 203+19.65

℄ CEDAR AVE

N51°51'14"E
S71°05'59"E
S01°38'29"W

MATCHLINE STA. 203+50.00

SSMH 15183
4' DIA CONCRETE STRUCTURE
TOP EL=837.65
FL IN NW=822.7 8" CIPP
FL IN SE=822.6 8" CIPP
FL OUT W=820.1 8" CIPP SAN

CURB INLET 115223
4'X5' CONCRETE STRUCTURE
TOP EL=834.83
FL IN SE=829.4 6" CMP
FL OUT NW=829.3 6" CMP
BOTTOM OF BOX AT TOP OF
15" VERTICAL CMP=832.6

LEGEND
PAVEMENT REMOVAL
SIDEWALK REMOVAL

SCALE
0 20 40 60

REMOVAL OF IMPROVEMENTS
SHEET 7 OF 8

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED	8/4/2025
ROUTE	24
STATE	MO
DISTRICT	KC
SHEET NO.	40
COUNTY	JACKSON
JOB NO.	JKU0226
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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MATCHLINE STA. 203+50.00

SW 1/4
33-T50N-R32W

END CONSTRUCTION
STA. 207+07.94, ℄ CEDAR AVE

END STA 207+07.94

PT STA 206+78.69

PC STA 206+21.31

PT STA 205+11.98

RC STA 204+81.54

START STA 100+00.00

CITY R/W
(EXIST.)

(R) 67 SY PAVEMENT

(R) 1717 SY PAVEMENT

(R) 22 LF CURB

(R) 348 SY PAVEMENT

R/W (EXIST.)

(R) SIGN

NEW R/W

℄ CEDAR AVE

CITY R/W (EXIST.)

DND TRANSMISSION POLE

POT STA 202+93.79

S72°25'02"E

S68°55'47"E

S02°01'42"W

S.L.

205

20

15

102+21.42

15258
A BRICK STRUCTURE
IN W=833.6 8" VCP
IN S=833.7 8" VCP
OUT E=833.5 8" VCP

LEGEND
PAVEMENT REMOVAL
SIDEWALK REMOVAL

SCALE
0 20 40 60

REMOVAL OF IMPROVEMENTS
SHEET 8 OF 8

STATE OF MISSOURI
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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	41

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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TYPICAL REINFORCING NOTES:

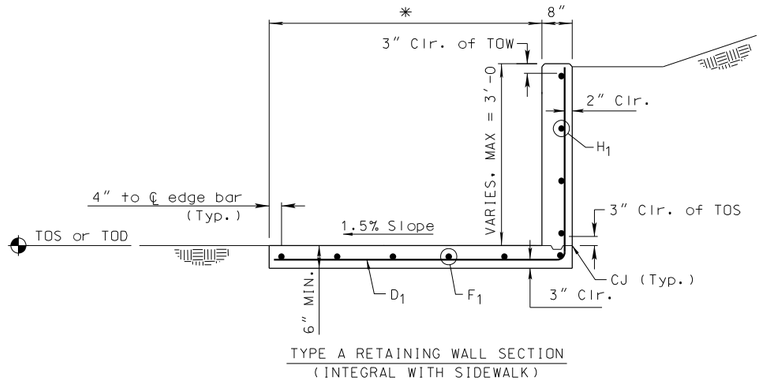
1. ABBREVIATIONS:
   CJ = CONSTRUCTION JOINT
   CONTR. JT = CONTRACTION JOINT
   EXP. JT = EXPANSION JOINT
   CL = CENTER LINE
   CLR = CLEARANCE
   TOW = TOP OF WALL
   TOS = TOP OF SIDEWALK
   TOF = TOP OF FOOTING
   TOD = TOP OF DRIVEWAY
   TOP = TOP OF PARKING LOT
   BOR = BILL OF REINFORCING STEEL
   EF = EACH FACE
   T&B = TOP & BOTTOM
   TF = TOP FACE
   BF = BOTTOM FACE
2. REINFORCING BAR LAP SPLICE LENGTHS SHALL BE AS SHOWN IN TABLE (THIS SHEET) UNLESS NOTED OTHERWISE ON THE DRAWINGS.
3. H1 BARS SHALL BE PLACED SUCH THAT THE UPPERMOST AND BOTTOMMOST BARS MAINTAIN A CONSTANT 3" CLEAR SPACING FROM TOW AND TOS, TOD, OR TOF, RESPECTIVELY. ANY INTERMEDIATE H1 BARS SHALL BE SPLAYED SUCH THAT THERE IS AN EVEN BAR SPACING AT THE BEGINNING AND END OF EACH SEGMENT, UNLESS OTHERWISE NOTED. FIELD BEND H1 BARS AT VERTICAL TRANSITIONS, AS NECESSARY, TO MAINTAIN MAXIMUM SPACINGS LISTED IN BAR CHART, THIS SHEET. TRIM H1 BARS AS NECESSARY TO AVOID CONGESTION AT BEGINNING OF SPLAY. MAINTAIN MINIMUM 1" CLEAR SPACING BETWEEN H1 BARS.
4. AT LEAST 3" OF CLEARANCE SHALL BE MAINTAINED BETWEEN FORMWORK AND THE END OF A BAR.
5. REINFORCING BARS FOLLOW NAMING CONVENTION DEFINED AS BELOW
   (BAR TYPE; see bar chart, this sheet) - (WALL SEGMENT)
   i.e. F2-4
6. FIELD BEND (AND CUT AS NEEDED) F2 & H1 BARS TO FIT HORIZ. ALIGNMENT.
7. VARIES BARS MAY BE SHOP OR FIELD CUT TO REQUIRED LENGTHS. NO ADDITIONAL PAYMENT WILL BE MADE FOR FIELD CUTTING AND FIELD BENDING REINFORCING STEEL.

BAR CHART - MAXIMUM BAR SPACING										
WALL TYPE	D_1	D_2	F_1	F_2	F_3	H_1	H_2	K_1	V_1	V_2
A	#4@9	-	#4@12	-	-	#4@12	-	-	-	-
B	#4@12	#4@18	#4@6	#4@12	#4@12	#4@18	-	-	-	-
C	#4@6	#4@18	#6@6	#4@12	#6@12	#4@18	-	-	#4@6	#4@18
D	#6@6	#4@18	#6@6	#4@12	#6@12	#4@18	-	-	#6@6	#4@18

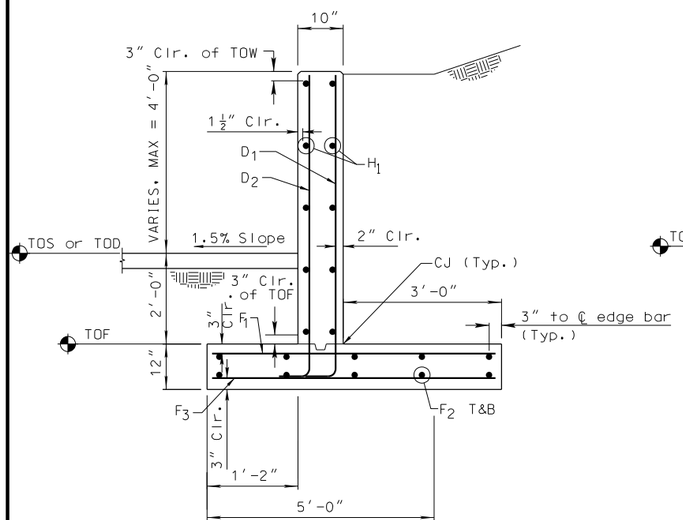
* VARIES, 5'-0 MIN., EXCEPT MAY BE REDUCED AT PRECAST DRAINAGE INLETS, ADA RAMPS, AND DRIVEWAY ENTRANCES. REFER TO WALL PLAN & PROFILE SHEETS.

† SEE WALL SECTIONS, THIS SHEET

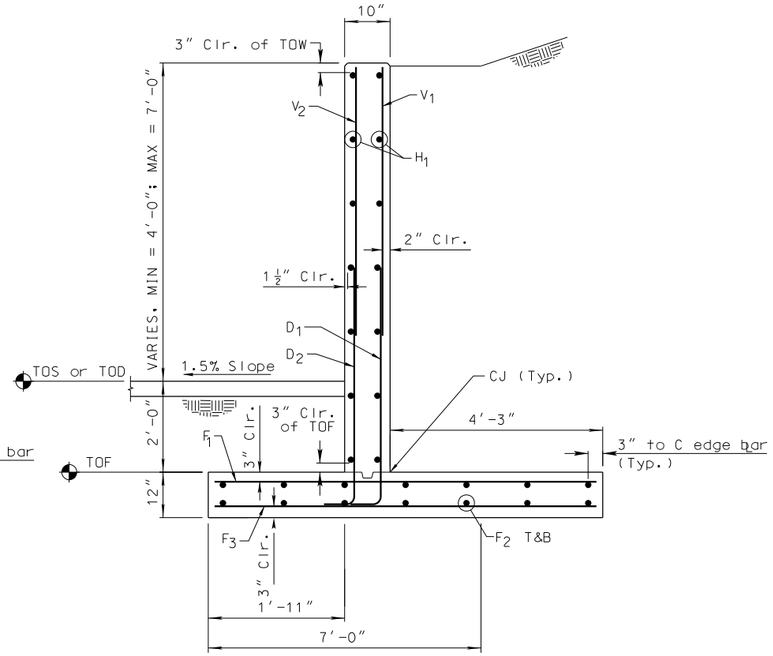
REINFORCING SPLICES		
BAR SIZE	SPLICE LENGTH	
	OTHER	TOP
#4	1'-7"	2'-1"
#5	2'-0"	2'-7"
#6	2'-5"	3'-1"



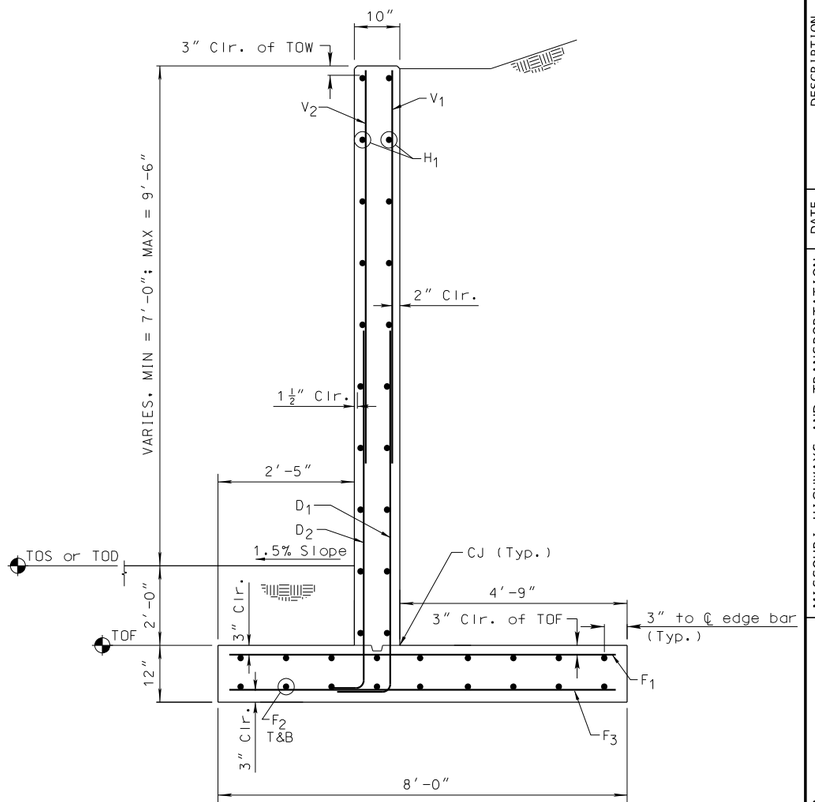
TYPE A RETAINING WALL SECTION
(INTEGRAL WITH SIDEWALK)



TYPE B RETAINING WALL SECTION



TYPE C RETAINING WALL SECTION



TYPE D RETAINING WALL SECTION

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

MISSOURI DEPARTMENT OF TRANSPORTATION

TYPE A, B, C & D
RETAINING WALL SECTIONS

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	42

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

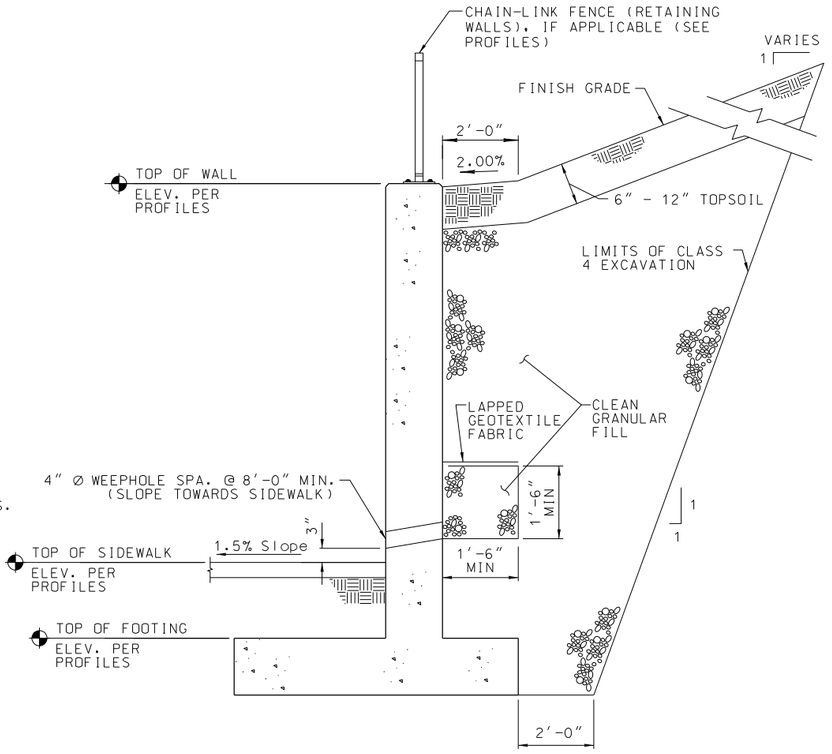
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MoDOT

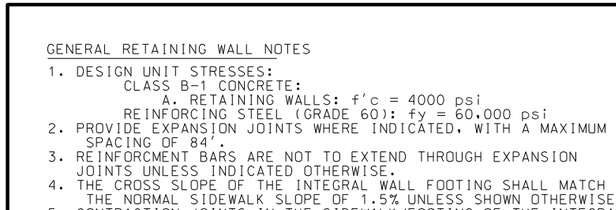
BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

GENERAL RETAINING WALL NOTES

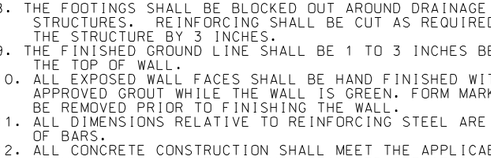
1. DESIGN UNIT STRESSES:
   CLASS B-1 CONCRETE:
   A. RETAINING WALLS: f'c = 4000 psi
   REINFORCING STEEL (GRADE 60): fy = 60,000 psi
2. PROVIDE EXPANSION JOINTS WHERE INDICATED, WITH A MAXIMUM SPACING OF 84'.
3. REINFORCMENT BARS ARE NOT TO EXTEND THROUGH EXPANSION JOINTS UNLESS INDICATED OTHERWISE.
4. THE CROSS SLOPE OF THE INTEGRAL WALL FOOTING SHALL MATCH THE NORMAL SIDEWALK SLOPE OF 1.5% UNLESS SHOWN OTHERWISE.
5. CONTRACTION JOINTS IN THE SIDEWALK/FOOTING OF THE INTEGRAL WALL SHALL BE TOOLED AND HAVE A MAXIMUM DEPTH OF $\frac{1}{2}$ INCH. CONTRACTION JOINTS IN THE STEM OF THE INTEGRAL WALL SHALL ALIGN WITH THE SIDEWALK/FOOTING JOINTS, AND SHALL BE SPACED AT 8', MAXIMUM.
6. FOR NON-INTEGRAL WALLS, THE CONTRACTION JOINTS SHALL BE SPACED AT 28', MAXIMUM, AND SHOULD ALIGN WITH THE NEAREST SIDEWALK JOINT.
7. AT THE CONTRACTOR'S OPTION, CONTRACTION JOINTS IN THE STEMS OF ALL WALL TYPES MAY BE SAW CUT ON ALL EXPOSED FACES (MAXIMUM DEPTH = $\frac{1}{2}$ INCH) INSTEAD OF COLD JOINTS AS SHOWN IN THE CONTRACTION JOINT DETAIL, ON THIS SHEET.
8. THE FOOTINGS SHALL BE BLOCKED OUT AROUND DRAINAGE STRUCTURES. REINFORCING SHALL BE CUT AS REQUIRED TO CLEAR THE STRUCTURE BY 3 INCHES.
9. THE FINISHED GROUND LINE SHALL BE 1 TO 3 INCHES BELOW THE TOP OF WALL.
10. ALL EXPOSED WALL FACES SHALL BE HAND FINISHED WITH AN APPROVED GROUT WHILE THE WALL IS GREEN. FORM MARKS SHALL BE REMOVED PRIOR TO FINISHING THE WALL.
11. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE OUT-TO-OUT OF BARS.
12. ALL CONCRETE CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION, AND SPECIAL PROVISIONS.
13. ALL DOWELS SHALL BE ACCURATELY PLACED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF BOTTOM SLAB CONCRETE. STICKING OF DOWELS INTO FRESH OR PARTIALLY HARDENED CONCRETE WILL NOT BE ACCEPTABLE.
14. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS AT 3' MAXIMUM SPACING.
15. ALL GEOTEXTILE FILTER FABRIC SHALL MEET THE REQUIREMENTS OF AASHTO M288 CLASS A OR APPROVED EQUAL.
16. THE COST FOR WALL DRAINAGE AND EXPANSION/CONTRACTION JOINT INSTALLATION SHALL BE SUBSIDIARY TO OTHER WALL BID ITEMS.
17. WEEPHOLES MAY BE A FORMED OPENING OR CORRUGATED POLYETHYLENE TUBING.
18. $\frac{3}{4}$" CHAMFER SHALL BE USED ON ALL EXPOSED CORNERS OF WALLS.



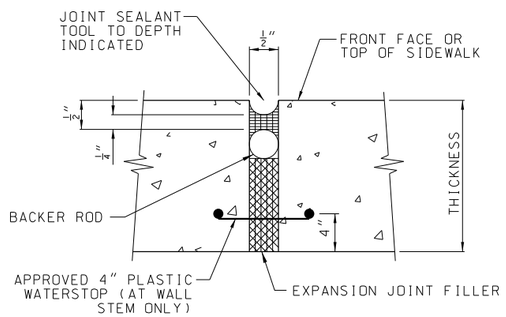
DRAINAGE & EXCAVATION DETAILS
RETAINING WALL TYPES B, C & D



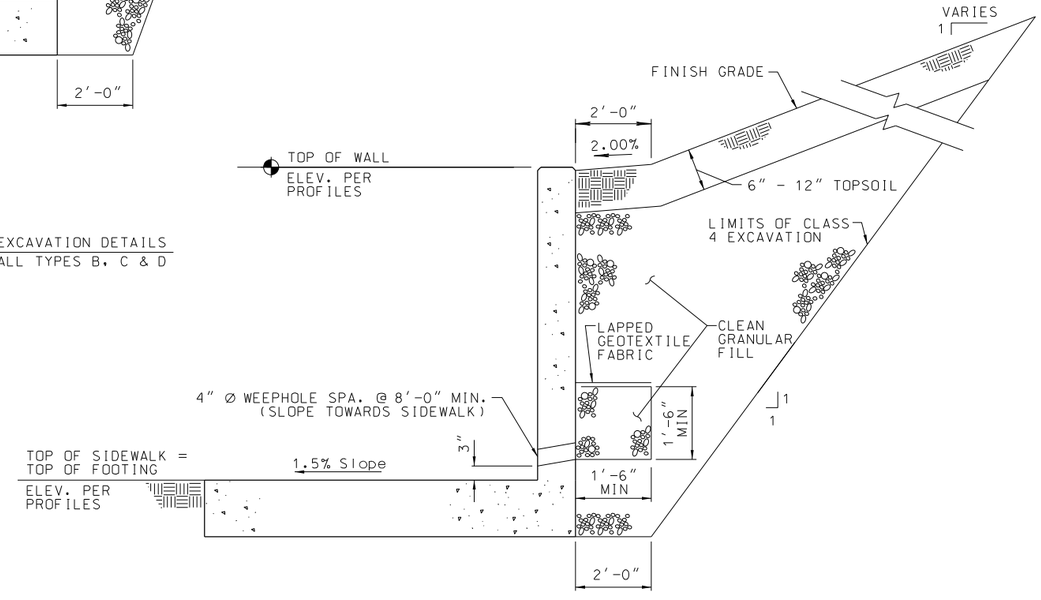
TYPICAL CONSTRUCTION/CONTRACTION JOINT DETAIL



TYPICAL EXPANSION JOINT DETAIL
(ALL BELOW-GRADE LOCATIONS)



TYPICAL EXPANSION JOINT DETAIL
(ALL EXPOSED JOINTS)



DRAINAGE & EXCAVATION DETAILS
RETAINING WALL TYPE A
(INTEGRAL WITH SIDEWALK)

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

MISSOURI DEPARTMENT OF TRANSPORTATION

TYPE A, B, C & D
RETAINING WALL DETAILS

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	43

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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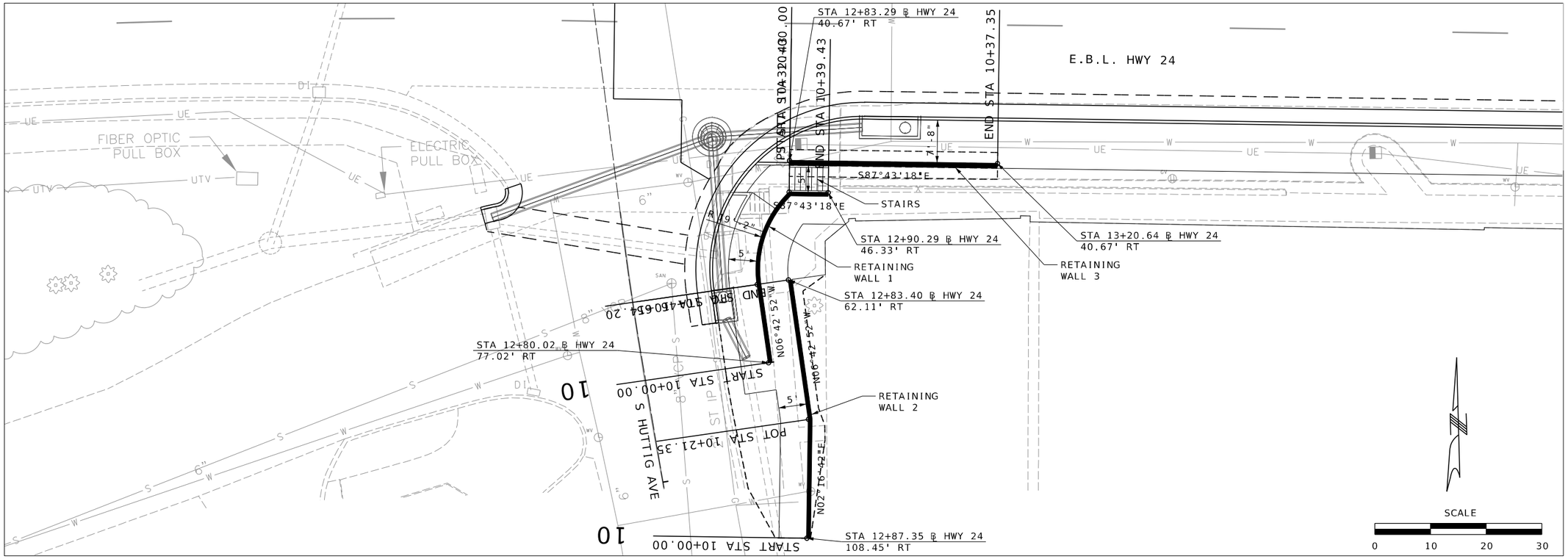
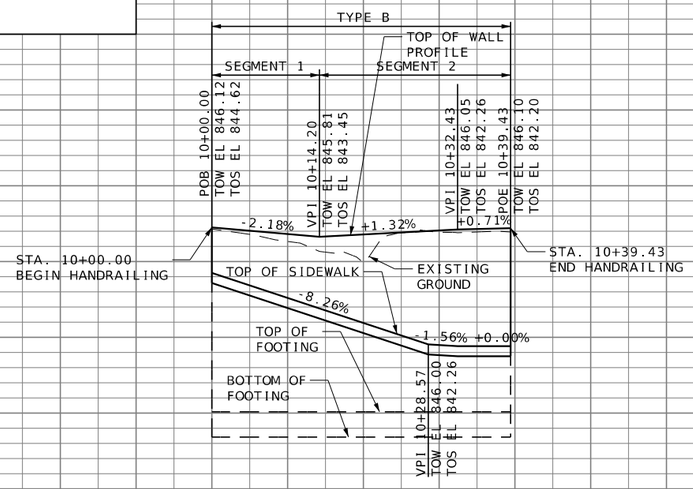
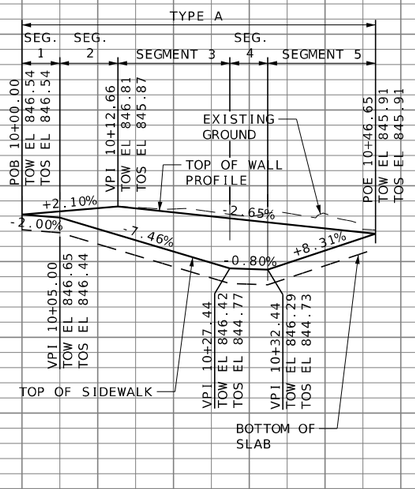


NOTES:
RETAINING WALL BASELINE IS AT FACE OF WALL CLOSEST TO PROJECT BASELINE.

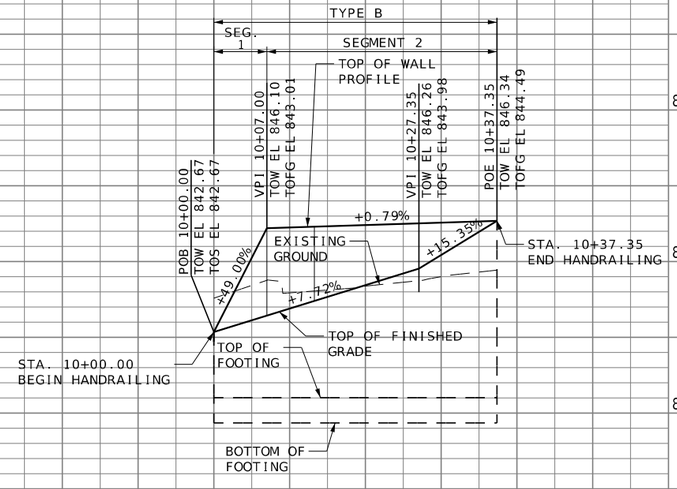
TOW = TOP OF WALL
TOS = TOP OF SIDEWALK



RETAINING WALL 1



RETAINING WALL 2



RETAINING WALL 3

RETAINING WALL PLAN-PROFILE
SHEET 1 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	44

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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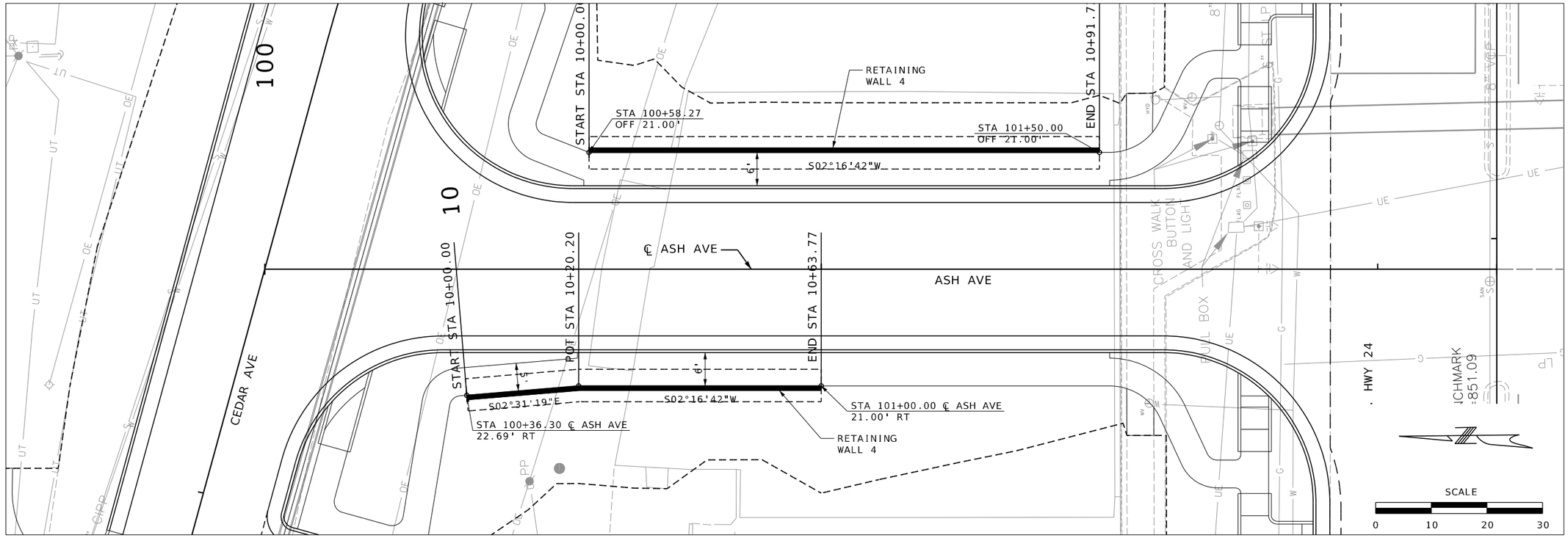

NOTES:
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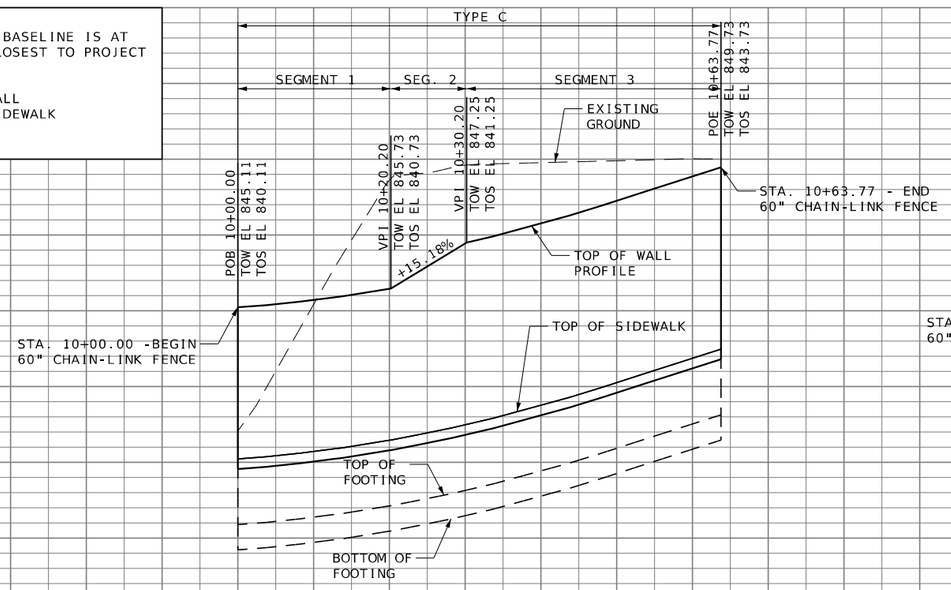
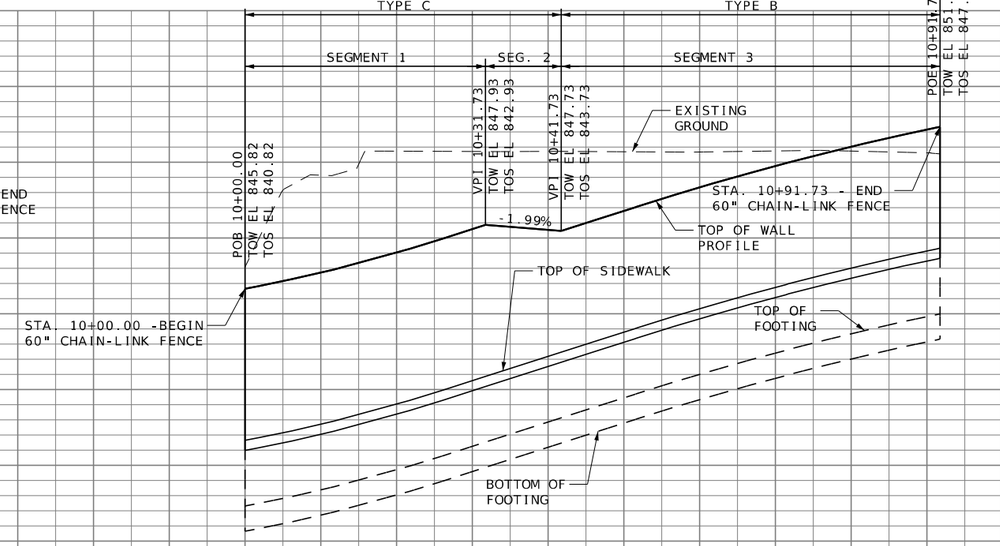
TOS = TOP OF SIDEWALK



RETAINING WALL 4



RETAINING WALL 5

RETAINING WALL PLAN-PROFILE
SHEET 2 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	45

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

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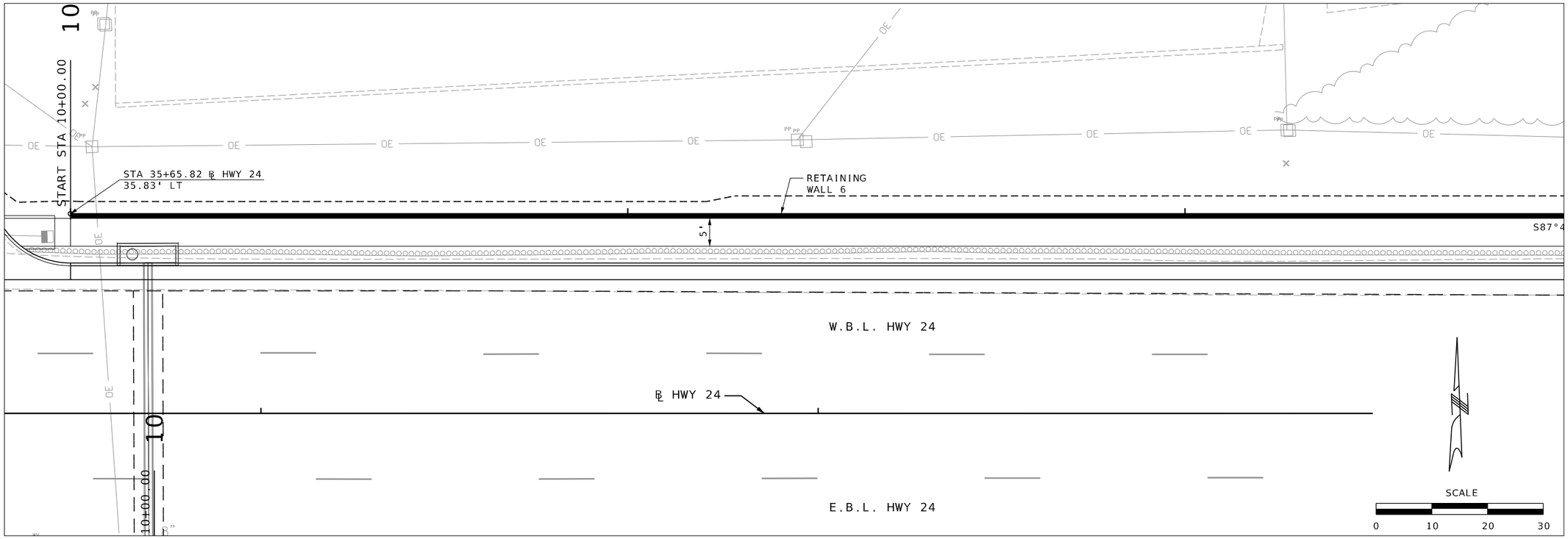
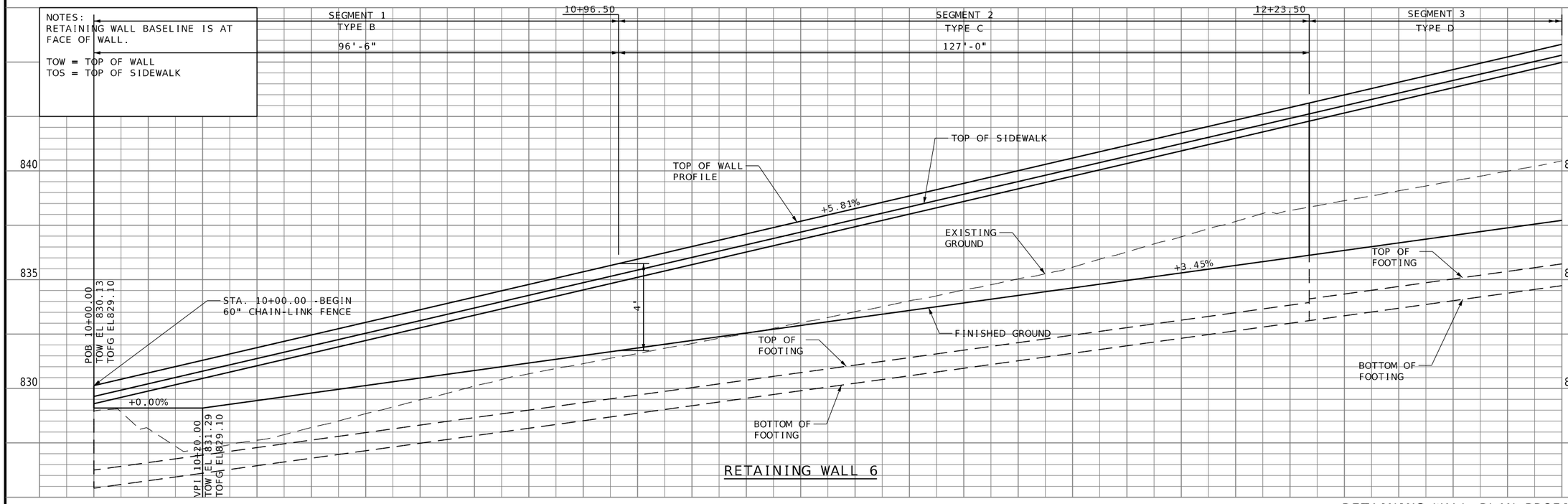


NOTES:
RETAINING WALL BASELINE IS AT FACE OF WALL.

TOW = TOP OF WALL
TOS = TOP OF SIDEWALK



RETAINING WALL 6

RETAINING WALL PLAN-PROFILE
SHEET 3 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	46

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

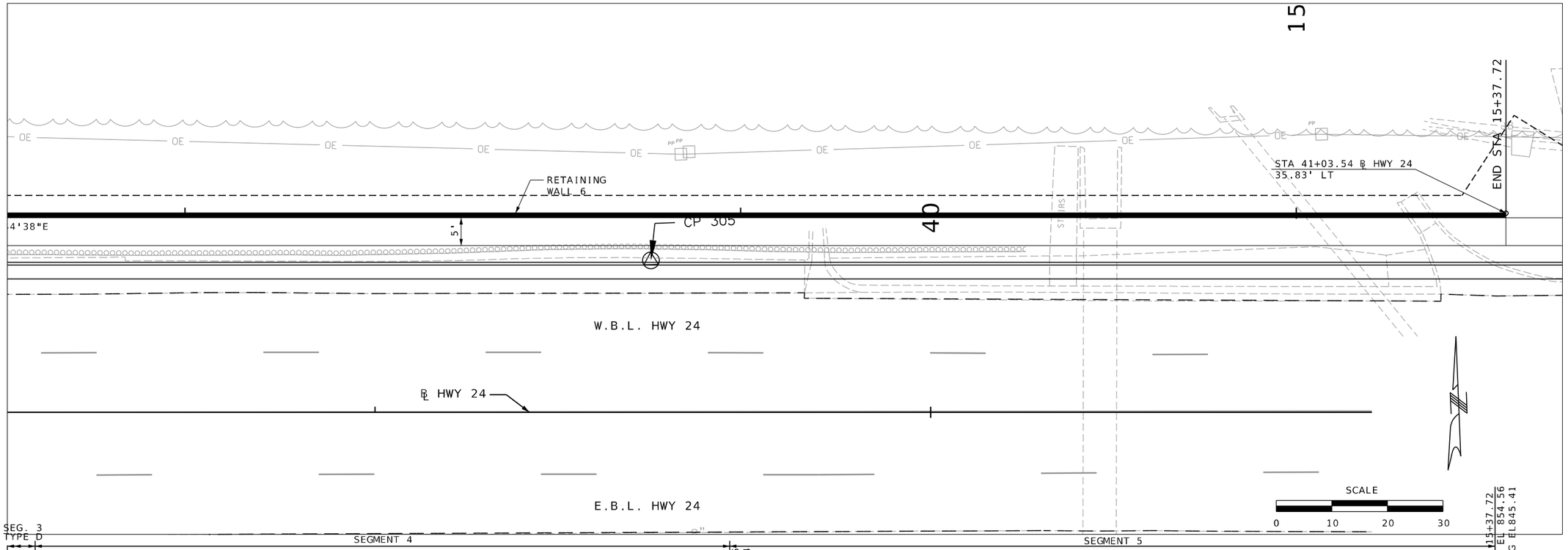
DESCRIPTION	DATE

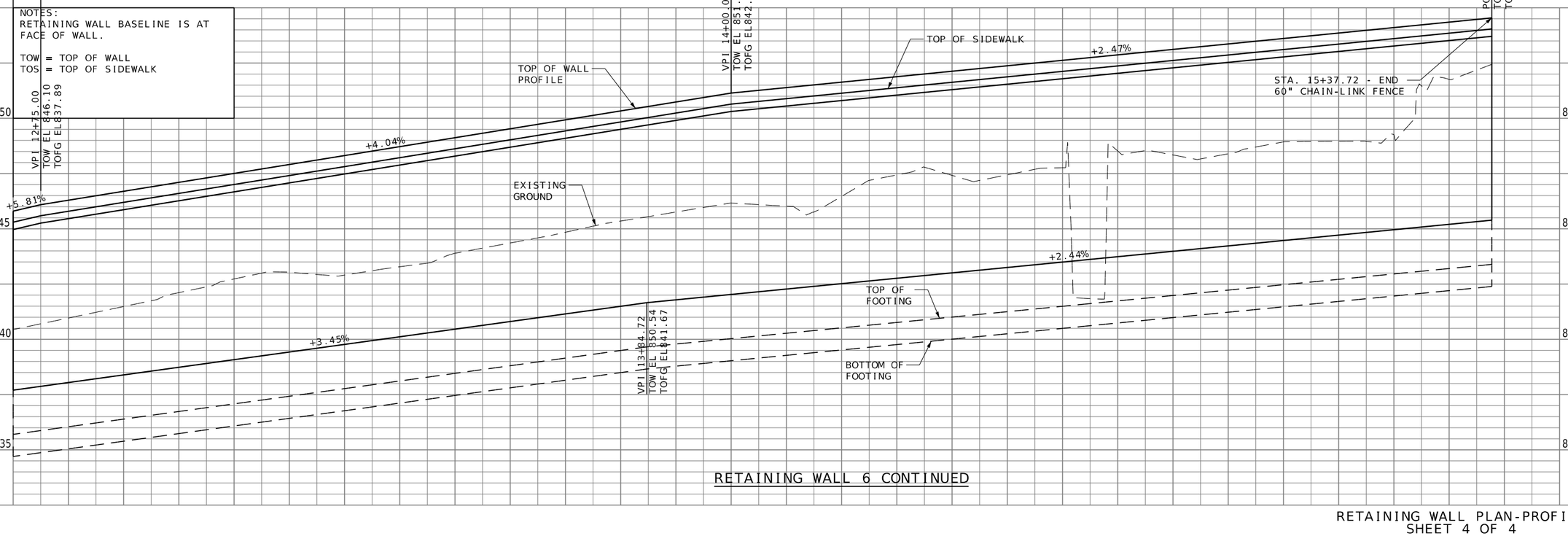
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.





RETAINING WALL 6 CONTINUED

RETAINING WALL PLAN-PROFILE
SHEET 4 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	47

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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No.: 000165

REV.

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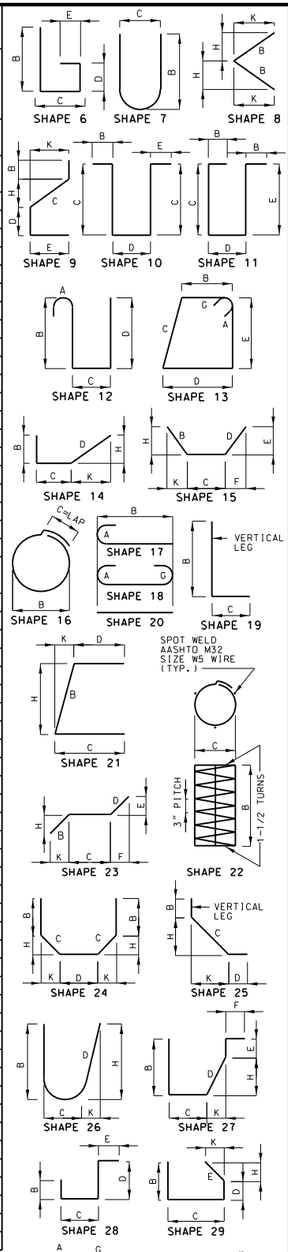
BILL OF REINFORCING STEEL

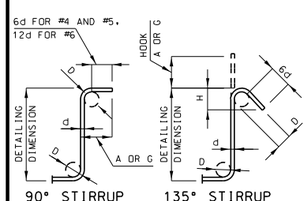
NO. REQ'D.	MARK NO. SIZE	MARK NO. MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
WALL 01																												
227	4	D1-1	Stem/Footing		19			V	1	6	5.000	0	8.000											7	1	7	0	
8			Inc. = 0.285"							6	1.000	0	8.000											6	9	6	8	68
2	4	D1-2	Stem/Footing		19			V	1	6	1.000	0	8.000											6	9	6	8	
2			Inc. = 0.160"							6	5.000	0	8.000											7	1	7	0	119
2	4	D2-1	Stem/Footing		19			V	1	6	5.000	0	8.000											7	1	7	0	
60			Inc. = 0.440"							6	1.000	0	8.000											6	9	6	8	46
18	4	D2-2	Stem/Footing		19			V	1	6	1.000	0	8.000											6	9	6	8	
			Inc. = 0.235"							6	5.000	0	8.000											7	1	7	0	82
29	4	F1-1	Footing		20					4	6.000													4	6	4	6	87
50	4	F1-2	Footing		20					4	6.000													4	6	4	6	150
12	4F2-1/2		Footing		20					41	3.000													41	3	41	3	331
			Inc. = 13"							38	0.000																	
15	4	F3-1	Footing		20					4	6.000													4	6	4	6	45
25	4	F3-2	Footing		20					4	6.000													4	6	4	6	75
10	4H1-1/2		Stem		20					39	6.000													39	6	39	6	264
WALL 02																												
7	4	D1-1	Stem/Footing		19			V	1			5	3.000											5	3	5	2	
			Inc. = 1.167"							0	7.000	5	3.000											5	10	5	9	26
11	4	D1-2	Stem/Footing		19			V	1	0	7.000	5	3.000											5	10	5	9	
			Inc. = 0.800"							1	3.000	5	3.000											6	6	6	5	33
20	4	D1-3	Stem/Footing		19			V	1	1	3.000	5	3.000											6	6	6	5	
			Inc. = 0.474"							2	0.000	5	3.000											7	3	7	2	91
7	4	D1-4	Stem/Footing		19			V	1	2	0.000	5	3.000											7	3	7	2	
			Inc. = 0.167"							1	11.000	5	3.000											7	2	7	1	33
20	4	D1-5	Stem/Footing		19			V	1	1	11.000	5	3.000											7	2	7	1	
			Inc. = 1.210"									5	3.000											5	3	5	2	82
6	4F1-1/2		Footing		20					28	7.000													28	7	28	7	115
6	4F1-4/5		Footing		20					20	0.000	2	0.000											20	0	20	0	80
2	4	H1-1	Stem		20					41	0.000													41	0	41	0	55
WALL 03																												
8	4	D1-1	Stem/Footing		19			V	1	2	5.000	0	8.000											3	1	3	0	
			Inc. = 5.870"							5	10.000	0	8.000											6	6	6	5	25
31	4	D1-2	Stem/Footing		19			V	1	5	11.000	0	8.000											6	7	6	6	
			Inc. = 0.100"							6	2.000	0	8.000											6	10	6	9	137
5	4	D2-1	Stem/Footing		19			V	1	2	5.000	0	8.000											3	1	3	0	
			Inc. = 10.26"							5	10.000	0	8.000											6	6	6	5	16
21	4	D2-2	Stem/Footing		19			V	1	5	11.000	0	8.000											6	7	6	6	
			Inc. = 0.150"							6	2.000	0	8.000											6	10	6	9	93
75	4F1-1/2		Footing		20					4	6.000													4	6	4	6	225
12	4F2-1/2		Footing		20					36	10.000													36	10	36	10	295
38	4F3-1/2		Footing		20					4	6.000													4	6	4	6	114
6	4H1-1/2		Stem/Lower part		20					36	10.000													36	10	36	10	148
6	4H1-1/2		Stem/Top part		20			V	1	30	4.000													30	4	30	4	
			Inc. = 23.5"							34	3.000													34	3	34	3	129

BILL OF REINFORCING STEEL

NO. REQ'D.	MARK NO. SIZE	MARK NO. MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
WALL 04																												
41	4	D1-1	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	167
21	4	D1-2	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	85
68	4	D1-3	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	276
14	4	D2-1	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	57
8	4	D2-2	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	33
23	4	D2-3	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	93
128	6F1-1/2		Footing		20					6	6.000													6	6	6	6	1250
32	4F2-1/2		Footing		20					34	6.000													34	6	34	6	737
64	6F3-1/2		Footing		20					6	6.000													6	6	6	6	625
24	4H1-1/2		Stem		20					33	6.000													33	6	33	6	537
2	4	H1-3	Stem/Top Bar		20					35	6.000													35	6	35	6	47
41	4	V1-1	Stem		20					4	1.000													4	1	4	1	112
21	4	V1-2	Stem		20		V	1		4	1.000													4	1	4	1	
			Inc. = 0.600"							5	1.000													5	1	5	1	64
68	4	V1-3	Stem		20					5	1.000													5	1	5	1	231
14	4	V2-1			20					4	1.000													4	1	4	1	38
8	4	V2-2			20		V	1		4	1.000													4	1	4	1	
										5	1.000													5	1	5	1	24
23	4	V2-3	Stem		20					5	1.000													5	1	5	1	78
WALL 05																												
64	4	D1-1	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	260
21	4	D1-2	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	85
51	4	D1-3	Stem/Footing		19					6	6.000	0	8.000											7	2	7	1	241
22	4	D2-1	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	89
8	4	D2-2	Stem/Footing		19					5	6.000	0	8.000											6	2	6	1	33
34	4	D2-3			19					6	6.000	0	8.000											7	2	7	1	161
84	6F1-1/2		Footing		20					6	6.000													6	6	6	6	820
101	4	F1-3	Footing		20					4	6.000													4	6	4	6	304
14	4F2-1/2		Footing		20					41	3.000													41	3	41	3	386
12	4	F2-3			20					51	6.000													51	6	51	6	413
42	6F3-1/2		Footing		20					6	6.000													6	6	6	6	410
51	4	F3-3	Footing		20					4	6.000													4	6	4	6	153
20	4H1-1/2/3		Stem		20					46	8.000													46	8	46	8	623
2	4	H1-1	Stem/Top Bar		20					43	6.000													43	6	43	6	58
64	4	V1-1	Stem		20					4	1.000													4	1	4	1	175
21	4	V1-2	Stem		20		V	1		4	1.000													4	1	4	1	
			Inc. = 0.600"							3	1.000													3	1	3	1	50
22	4	V2-1	Stem		20					4	1.000													4	1	4	1	60
8	4	V2-2	Stem		20		V	1		4	1.000													4	1	4	1	
			Inc. = 1.714"							3	1.000													3	1	3	1	19



BENDING DIAGRAMS

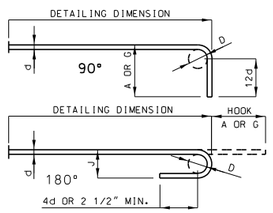


STIRRUP HOOK DIMENSIONS

GRADES 40 - 50 - 60 KSI

BAR SIZE	D (IN.)	90° HOOK A OR G	135° HOOK A OR G	135° HOOK APPROX. H
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	12"	8"	4 1/2"

NOTE: UNLESS OTHERWISE NOTED DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.



END HOOK DIMENSIONS

BAR SIZE	D (IN.)	ALL GRADES 180° HOOKS A OR G	180° HOOKS J	90° HOOKS A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9 1/2"	15"	11 3/4"	19"
#10	10 3/4"	17"	13 1/4"	22"
#11	12"	19"	14 3/4"	2'-0"
#14	18 1/4"	2'-3"	21 3/4"	2'-7"

NOTE:

ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEGREE ARE TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEGREE STANDARD HOOKS.

HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.

E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.

NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)

ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.

PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.

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 (GRADE 60) FY = 60,000 PSI.

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

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	48

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

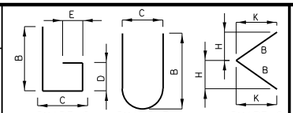
BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

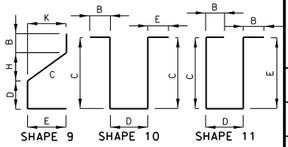
BILL OF REINFORCING STEEL

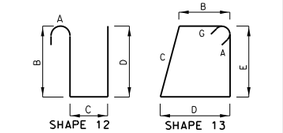
NO. REQ'D.	MARK NO. SIZE	MARK NO. MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
WALL 06																												
97	4	D1-1	Stem/Footing		19			V	1	4	3.000	0	8.000											4	11	4	10	
			Inc. = 281"						6	6.000	0	8.000											7	2	7	1	386
254	4	D1-2	Stem/Footing		19				5	6.000	0	8.000											6	2	6	1	1032
103	6	D1-3	Stem/Footing		19				5	6.000	1	0.000											6	6	6	4	980
250	6	D1-4	Stem/Footing		19				5	6.000	1	0.000											6	6	6	4	2378
276	6	D1-5	Stem/Footing		19				5	6.000	1	0.000											6	6	6	4	2625
65	4	D2-1	Stem/Footing		19			V	1	4	3.000	0	8.000											4	11	4	10	
			Inc. = 0.421"						6	6.000	0	8.000											7	2	7	1	259
85	4	D2-2	Stem/Footing		19				5	6.000	0	8.000											6	2	6	1	345
35	4	D2-3	Stem/Footing		19				5	6.000	0	8.000											6	2	6	1	142
84	4	D2-4	Stem/Footing		19				5	6.000	0	8.000											6	6	6	1	341
93	4	D2-5	Stem/Footing		19				5	6.000	0	8.000											6	2	6	1	378
194	4	F1-1	Footing		20				4	6.000														4	6	4	6	583
254	6	F1-2	Footing		20				6	6.000														6	6	6	6	2480
103	6	F1-3	Footing		20				7	6.000														7	6	7	6	1160
250	6	F1-4	Footing		20				7	6.000														7	6	7	6	2816
276	6	F1-5	Footing		20				7	6.000														7	6	7	6	3109
36	4	F2-1	Footing		20				33	6.000														33	6	33	6	806
48	4	F2-2	Footing		20				44	4.000														44	4	44	4	1422
36	4	F2-3	Footing		20				27	6.000														27	6	27	6	661
54	4	F2-4	Footing		20				43	6.000														43	6	43	6	1569
54	4	F2-5	Footing		20				47	6.000														47	6	47	6	1713
98	4	F3-1	Footing		20				4	6.000														4	6	4	6	295
128	6	F3-2	Footing		20				6	6.000														6	6	6	6	1250
52	6	F3-3	Footing		20				7	6.000														7	6	7	6	586
125	6	F3-4	Footing		20				7	6.000														7	6	7	6	1408
138	6	F3-5	Footing		20				7	6.000														7	6	7	6	1555
36	4	H1-1	Stem		20				33	6.000														33	6	33	6	806
42	4	H1-2	Stem		20				44	4.000														44	4	44	4	1244
32	4	H1-3	Stem		20				27	6.000														27	6	27	6	588
48	4	H1-4	Stem		20				43	6.000														43	6	43	6	1395
48	4	H1-5	Stem		20				47	6.000														47	6	47	6	1523
254	4	V1-2	Stem		20			V	1	3	1.000													3	1	3	1	
			Inc. = 0.095"						6	1.000														6	1	6	1	778
103	6	V1-3	Stem		20			V	1	7	1.000													7	1	7	1	
			Inc. = 0.137"						8	3.000														8	3	8	3	1186
250	6	V1-4	Stem		20			V	1	8	3.000													8	3	8	3	
			Inc. = 0.044"						9	2.000														9	2	9	2	3270
276	6	V1-5	Stem		20				9	2.000														9	2	9	2	3800
85	4	V2-2	Stem		20			V	1	3	1.000													3	1	3	1	
			Inc. = 0.428"						6	1.000														6	1	6	1	260
35	4	V2-3	Stem		20			V	1	6	1.000													6	1	6	1	
			Inc. = 0.411"						7	3.000														7	3	7	3	156
84	4	V2-4	Stem		20			V	1	7	3.000													7	3	7	3	
			Inc. = 0.133"						8	2.000														8	2	8	2	433
93	4	V2-5	Stem		20				8	2.000														8	2	8	2	507

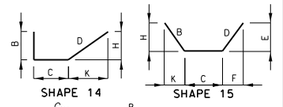
BILL OF REINFORCING STEEL

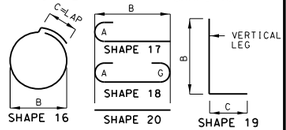
NO. REQ'D.	MARK NO. SIZE	MARK NO. MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
SUMMARIES																												
			Totals																									
	4																											26289
	6																											31708
			Total																									57997

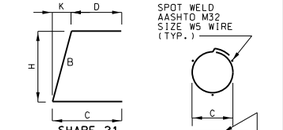


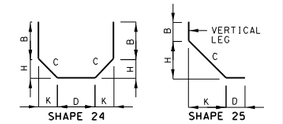


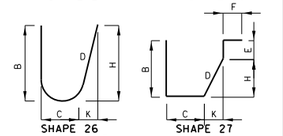


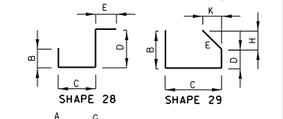


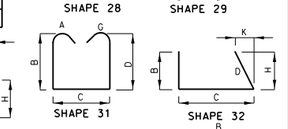


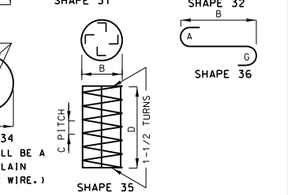




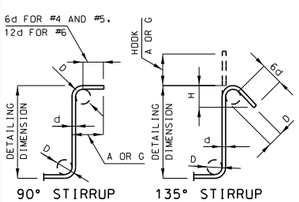






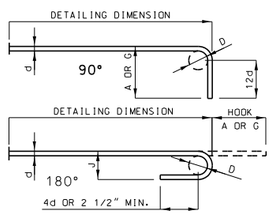


BENDING DIAGRAMS



STIRRUP HOOK DIMENSIONS				
GRADES 40 - 50 - 60 KSI				
BAR SIZE	D (IN.)	90° HOOK	135° HOOK	
		HOOK A OR G	HOOK A OR G	APPROX. H
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	12"	8"	4 1/2"

NOTE: UNLESS OTHERWISE NOTED DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.



END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	ALL GRADES		
		180° HOOKS		90° HOOKS
		A OR G	J	A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9 1/2"	15"	11 3/4"	19"
#10	10 3/4"	17"	13 1/4"	22"
#11	12"	19"	14 3/4"	2'-0"
#14	18 1/4"	2'-3"	21 3/4"	2'-7"

NOTE:
ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEGREE ARE TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEGREE STANDARD HOOKS.

HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.

E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.

NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)

ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.

PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.

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 (GRADE 60) FY = 60.000 PSI.

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

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	49

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

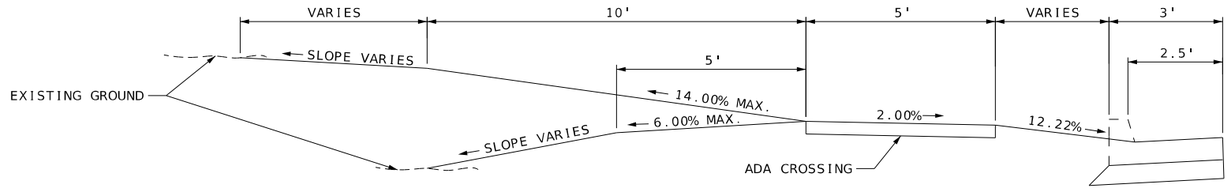
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

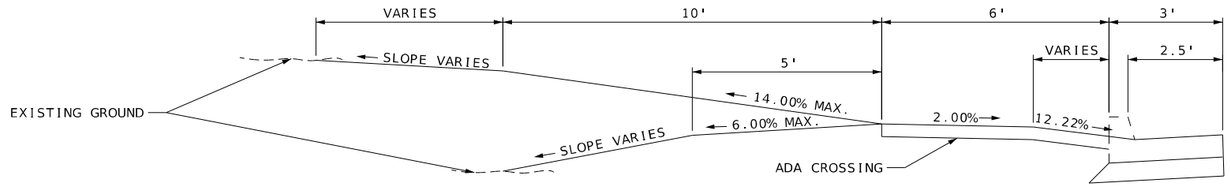
REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

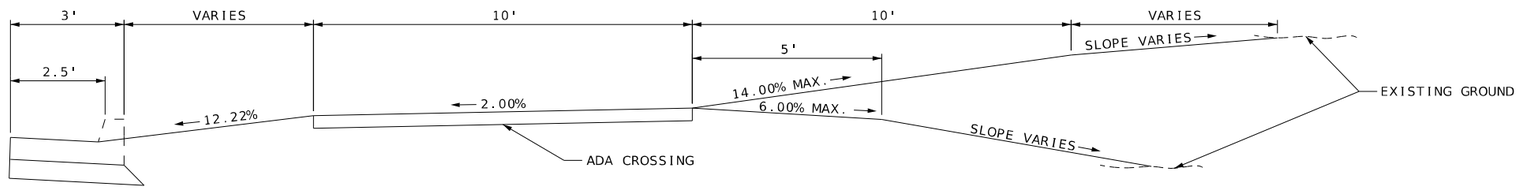
NOTE:
FOR ENTRANCE DETAILS, SEE STANDARD PLANS
203.61B-203.64E, 608.00K, & 609.00P



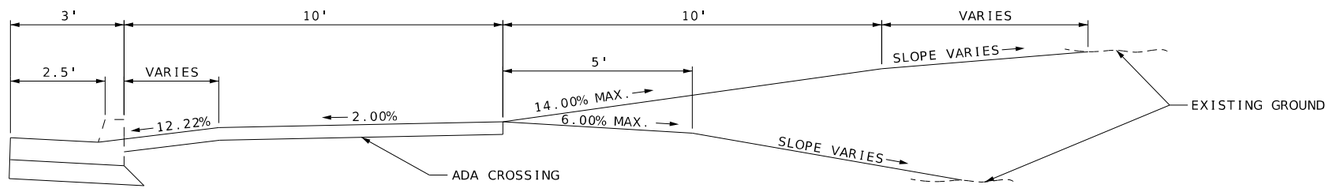
TYPICAL DRIVEWAY PROFILE - LT
3' GREEN SPACE AND 5' SIDEWALK



TYPICAL DRIVEWAY PROFILE - LT
0' GREEN SPACE AND 6' SIDEWALK



TYPICAL DRIVEWAY PROFILE - RT
5' GREEN SPACE AND 10' SIDEWALK



TYPICAL DRIVEWAY PROFILE - RT
0' GREEN SPACE AND 10' SIDEWALK

TYPICAL DRIVEWAY PROFILES
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

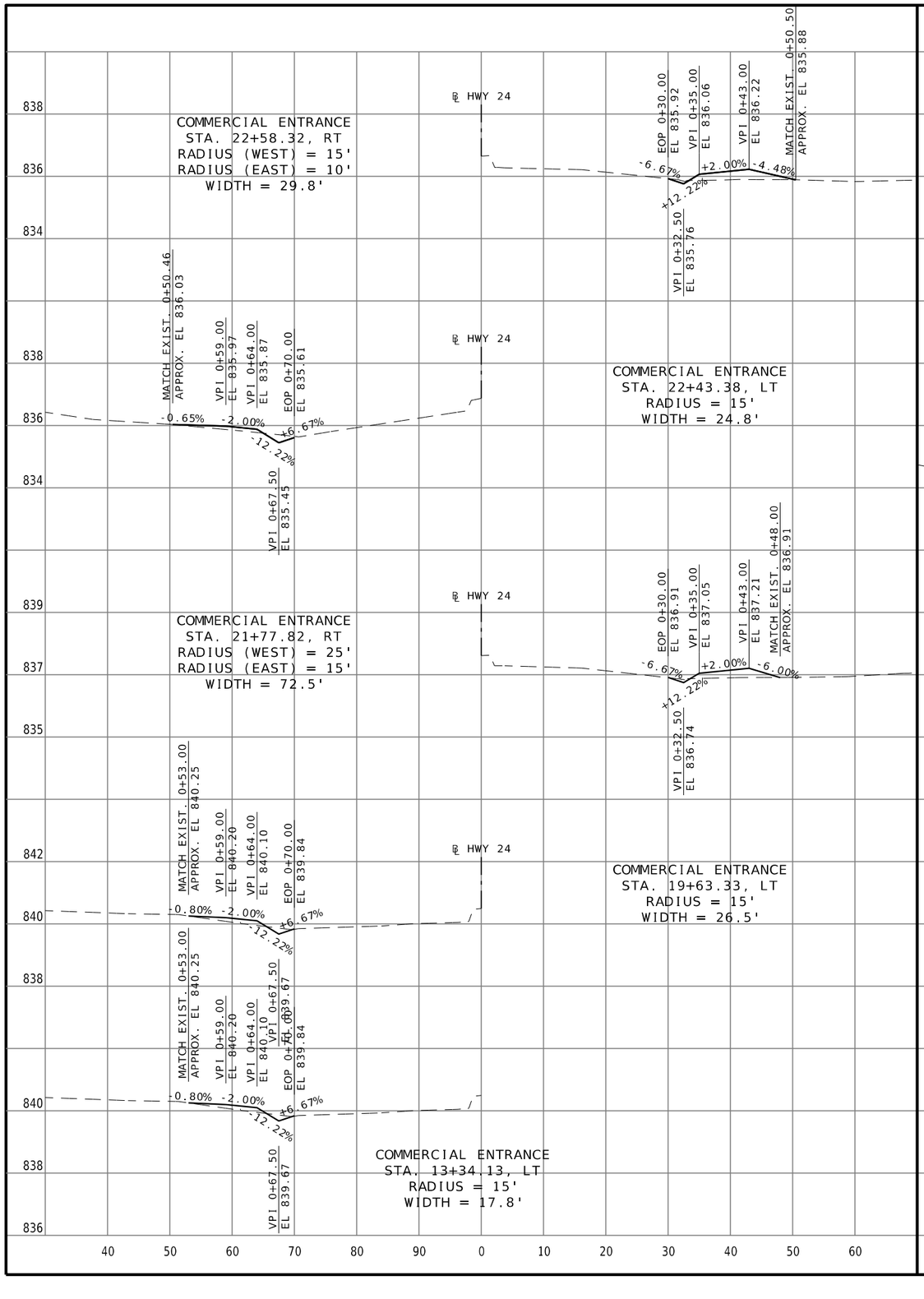
DATE PREPARED: 8/4/2025
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 50
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165



DRIVEWAY PROFILES SHEET
SHEET 1 OF 5

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	51

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

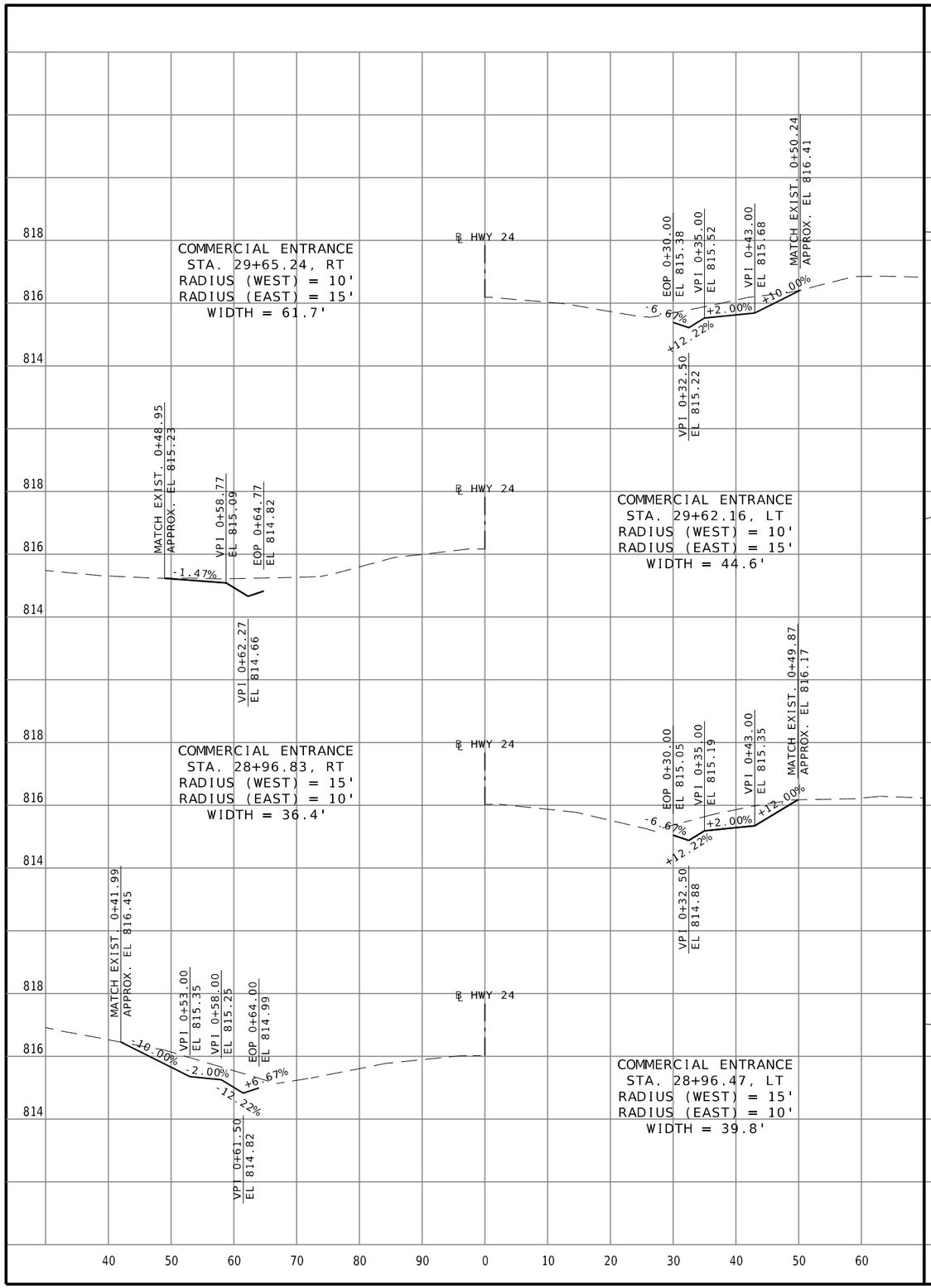
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.



DRIVEWAY PROFILES SHEET
SHEET 2 OF 5

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	52

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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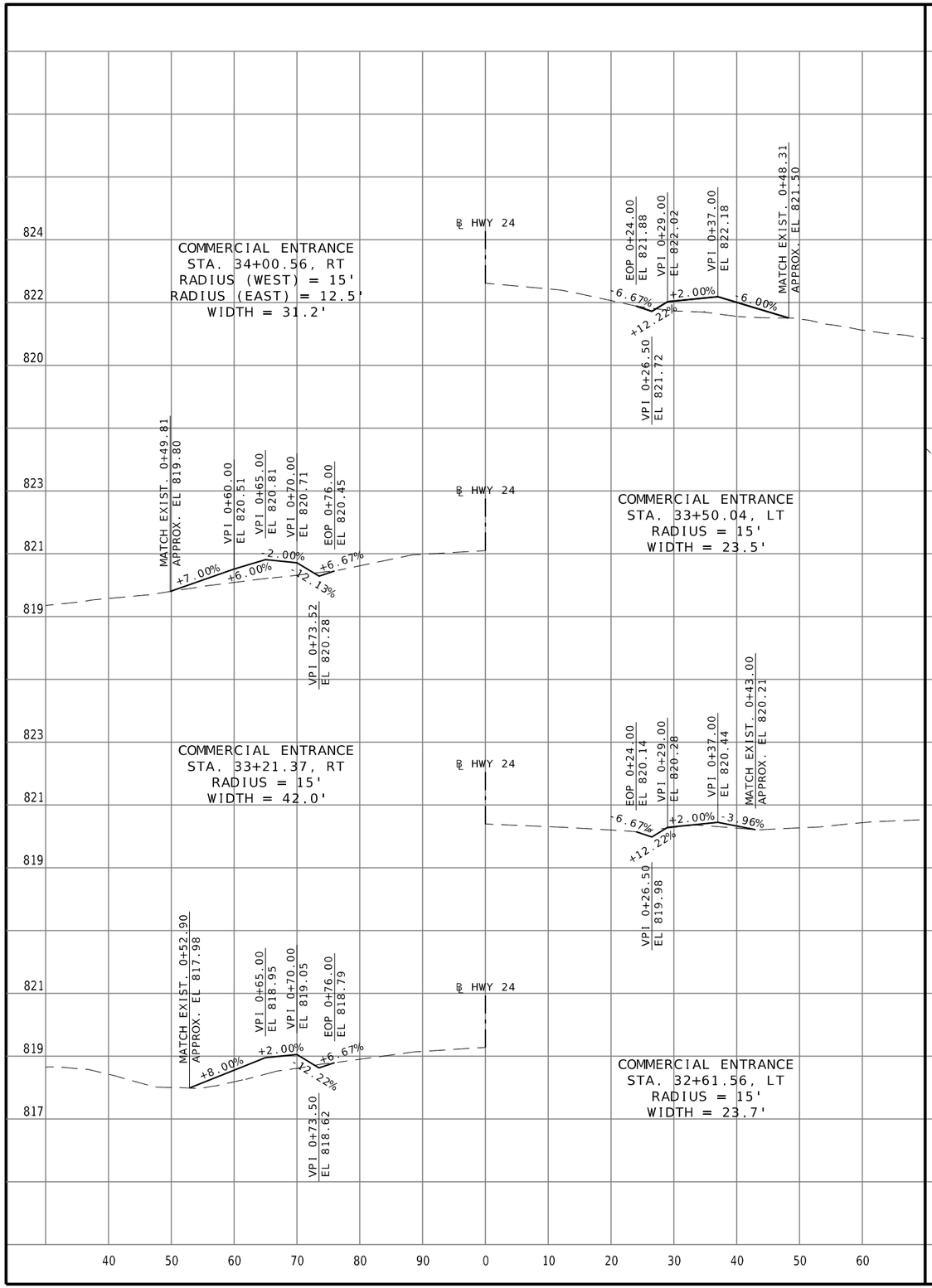

DRIVEWAY PROFILES SHEET
SHEET 3 OF 5

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	53

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

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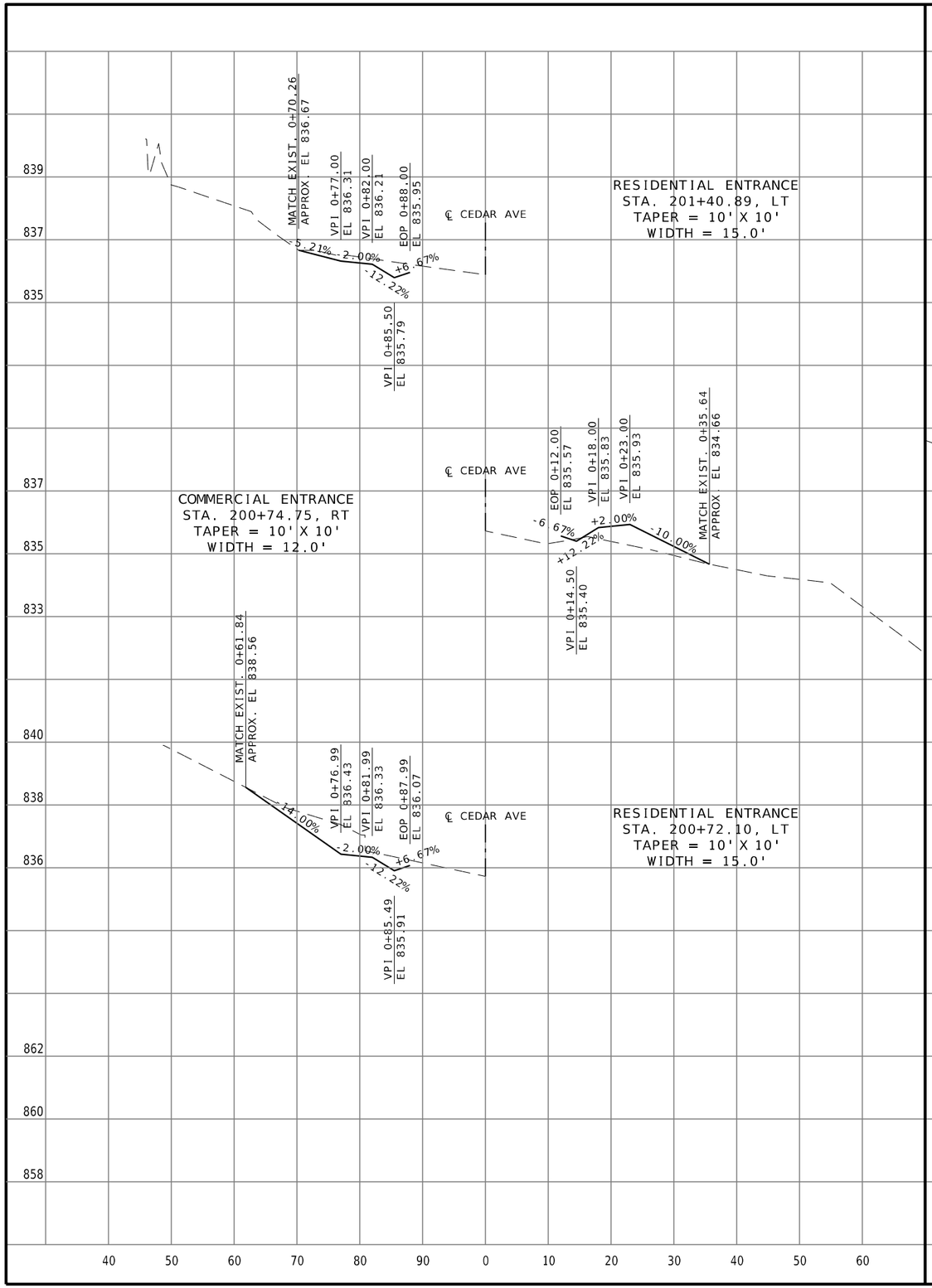

DRIVEWAY PROFILES SHEET
SHEET 4 OF 5

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	54

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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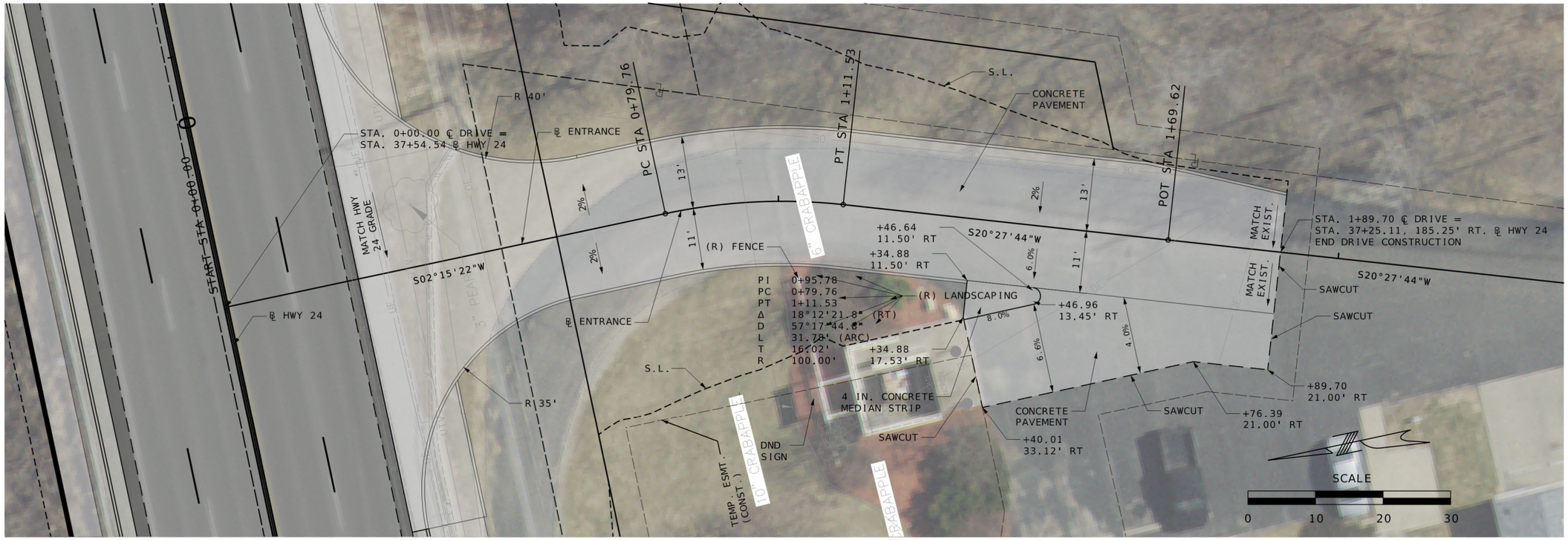

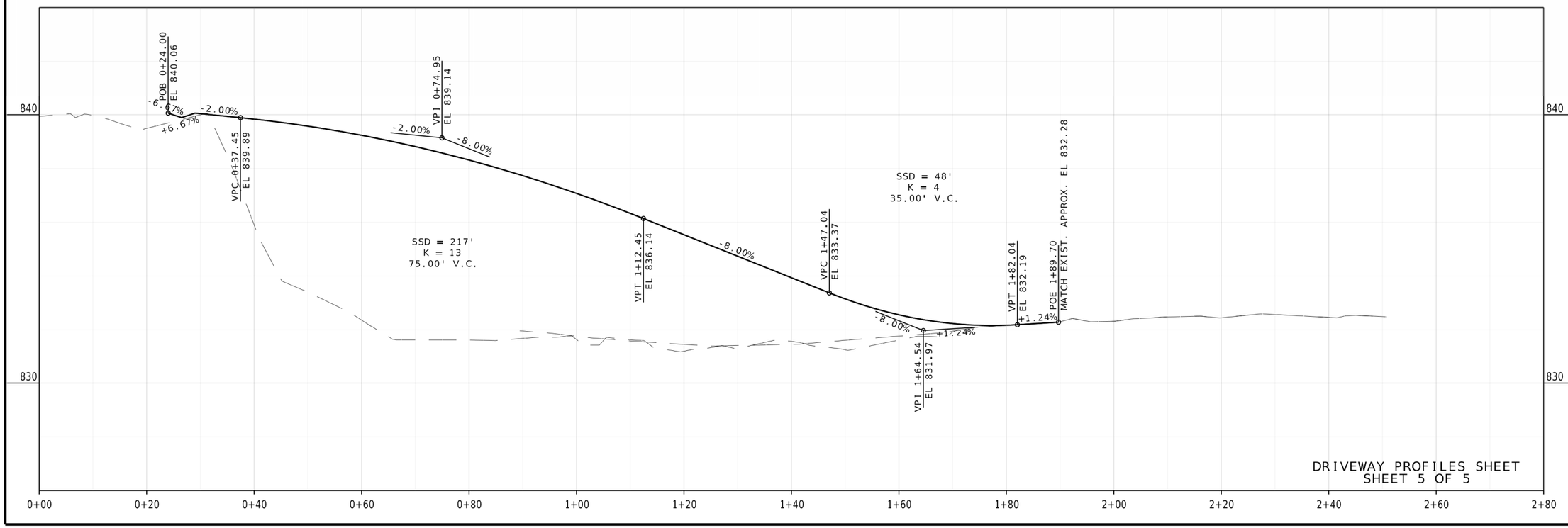

DRIVEWAY PROFILES SHEET
SHEET 5 OF 5

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	55

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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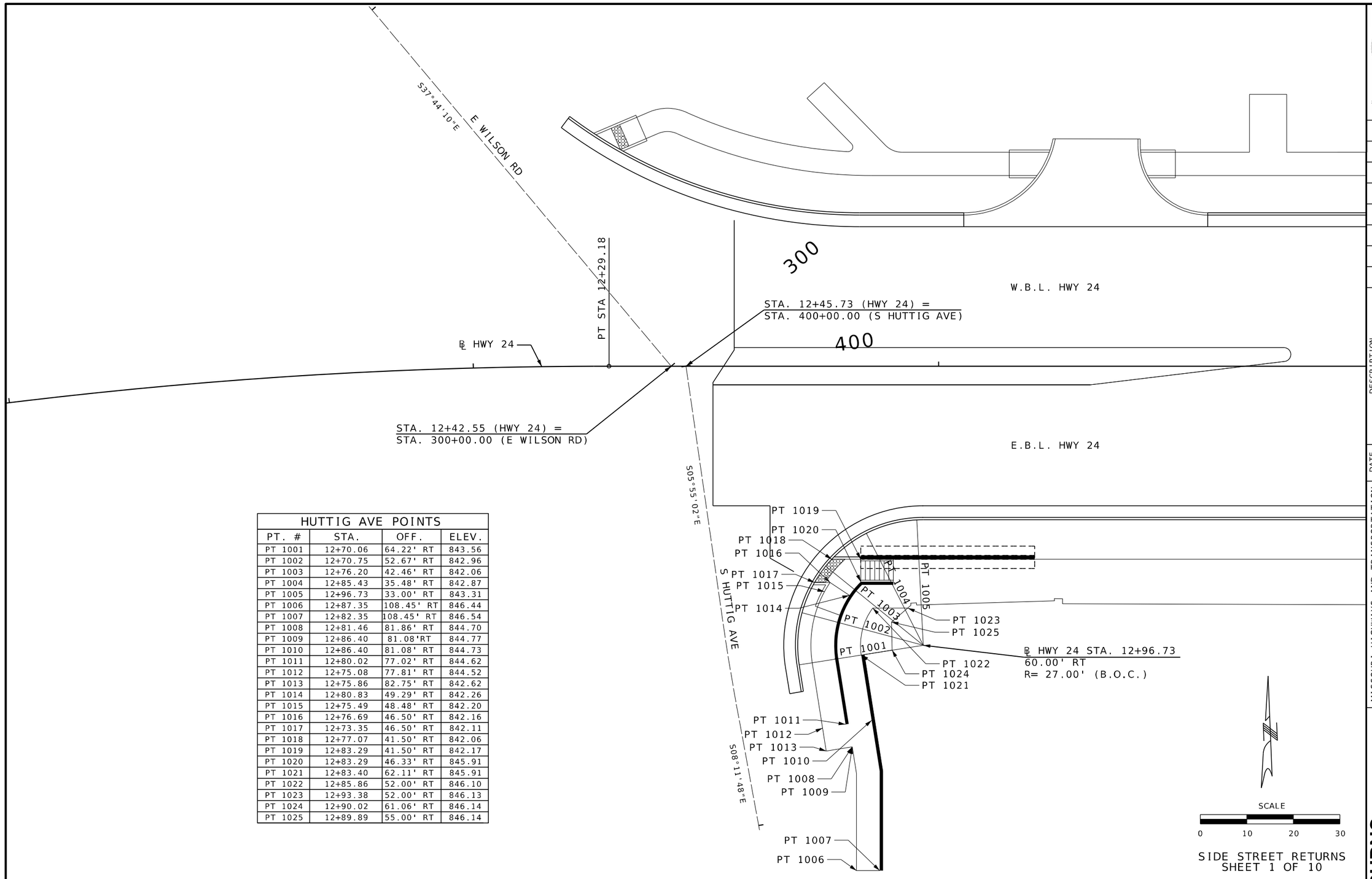
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165



SIDE STREET RETURNS
SHEET 1 OF 10

HUTTIG AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1001	12+70.06	64.22' RT	843.56
PT 1002	12+70.75	52.67' RT	842.96
PT 1003	12+76.20	42.46' RT	842.06
PT 1004	12+85.43	35.48' RT	842.87
PT 1005	12+96.73	33.00' RT	843.31
PT 1006	12+87.35	108.45' RT	846.44
PT 1007	12+82.35	108.45' RT	846.54
PT 1008	12+81.46	81.86' RT	844.70
PT 1009	12+86.40	81.08'RT	844.77
PT 1010	12+86.40	81.08' RT	844.73
PT 1011	12+80.02	77.02' RT	844.62
PT 1012	12+75.08	77.81' RT	844.52
PT 1013	12+75.86	82.75' RT	842.62
PT 1014	12+80.83	49.29' RT	842.26
PT 1015	12+75.49	48.48' RT	842.20
PT 1016	12+76.69	46.50' RT	842.16
PT 1017	12+73.35	46.50' RT	842.11
PT 1018	12+77.07	41.50' RT	842.06
PT 1019	12+83.29	41.50' RT	842.17
PT 1020	12+83.29	46.33' RT	845.91
PT 1021	12+83.40	62.11' RT	845.91
PT 1022	12+85.86	52.00' RT	846.10
PT 1023	12+93.38	52.00' RT	846.13
PT 1024	12+90.02	61.06' RT	846.14
PT 1025	12+89.89	55.00' RT	846.14

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	56

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

WILSON RD POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1026	12+21.13	53.72' LT	843.85
PT 1027	12+34.83	44.82' LT	843.74
PT 1028	12+50.18	38.31' LT	843.45
PT 1029	12+66.36	34.34' LT	843.15
PT 1030	12+82.98	33.00' LT	843.11

℄ HWY 24 STA. 12+82.98
137.00' LT
R= 104.00' (B.O.C.)

PT 1026
PT 1027
PT 1028
PT 1029
PT 1030

S37°44'10"E

E WILSON RD

PT STA 12+29.18

300

W.B.L. HWY 24

STA. 12+45.73 (HWY 24) =
STA. 400+00.00 (S HUTTIG AVE)

400

℄ HWY 24

STA. 12+42.55 (HWY 24) =
STA. 300+00.00 (E WILSON RD)

S HUTTIG AVE

S05°55'02"E

E.B.L. HWY 24

SCALE
0 10 20 30

SIDE STREET RETURNS
SHEET 1 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	57

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

ASH AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1101	15+52.51	33.00'	848.81
PT 1102	15+62.84	35.06'	848.81
PT 1103	15+71.60	40.91'	848.55
PT 1104	15+77.46	49.67'	848.09
PT 1105	15+79.51	60.00'	847.62

℄ HWY 24 STA. 15+52.51
60.00' LT
R= 27.00' (B.O.C.)

PT 1105
PT 1104
PT 1103
PT 1102
PT 1101

15

S ASH AVE

ASH AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1106	16+09.51	60.00'	847.62
PT 1107	16+11.57	49.67'	848.09
PT 1108	16+17.42	40.91'	848.45
PT 1109	16+26.18	35.06'	848.40
PT 1110	16+36.51	33.00'	848.17

℄ HWY 24 STA. 16+36.51
60.00' LT
R= 27.00' (B.O.C.)

PT 1106
PT 1107
PT 1108
PT 1109
PT 1110

W.B.L. HWY 24

℄ HWY 24

500

S87°43'18"E

END STA 102+21.42

600

STA. 15+94.51 (HWY 24) =
STA. 102+21.42 (S ASH AVE) =
STA. 600+00.00 (S ASH AVE EXIST)

E.B.L. HWY 24

S ASH AVE

S02°16'42"W

PT 1111
PT 1112
PT 1113
PT 1114
PT 1115

℄ HWY 24 STA. 15+49.46
60.00' RT
R= 27.00' (B.O.C.)

ASH AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1111	15+49.46	33.00'	848.94
PT 1112	15+59.67	35.00'	848.96
PT 1113	15+68.36	40.72'	849.35
PT 1114	15+74.25	49.30'	849.62
PT 1115	15+76.45	59.47'	849.95

PT 1116
PT 1117
PT 1118
PT 1119
PT 1120

℄ HWY 24 STA. 16+37.19
60.00' RT
R= 27.00' (B.O.C.)

ASH AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1116	16+10.19	60.36'	849.33
PT 1117	16+12.14	49.92'	848.96
PT 1118	16+17.97	41.04'	848.78
PT 1119	16+26.77	35.09'	848.60
PT 1120	16+37.19	33.00'	848.36

SCALE
0 10 20 30

SIDE STREET RETURNS
SHEET 3 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	58

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION | DATE | REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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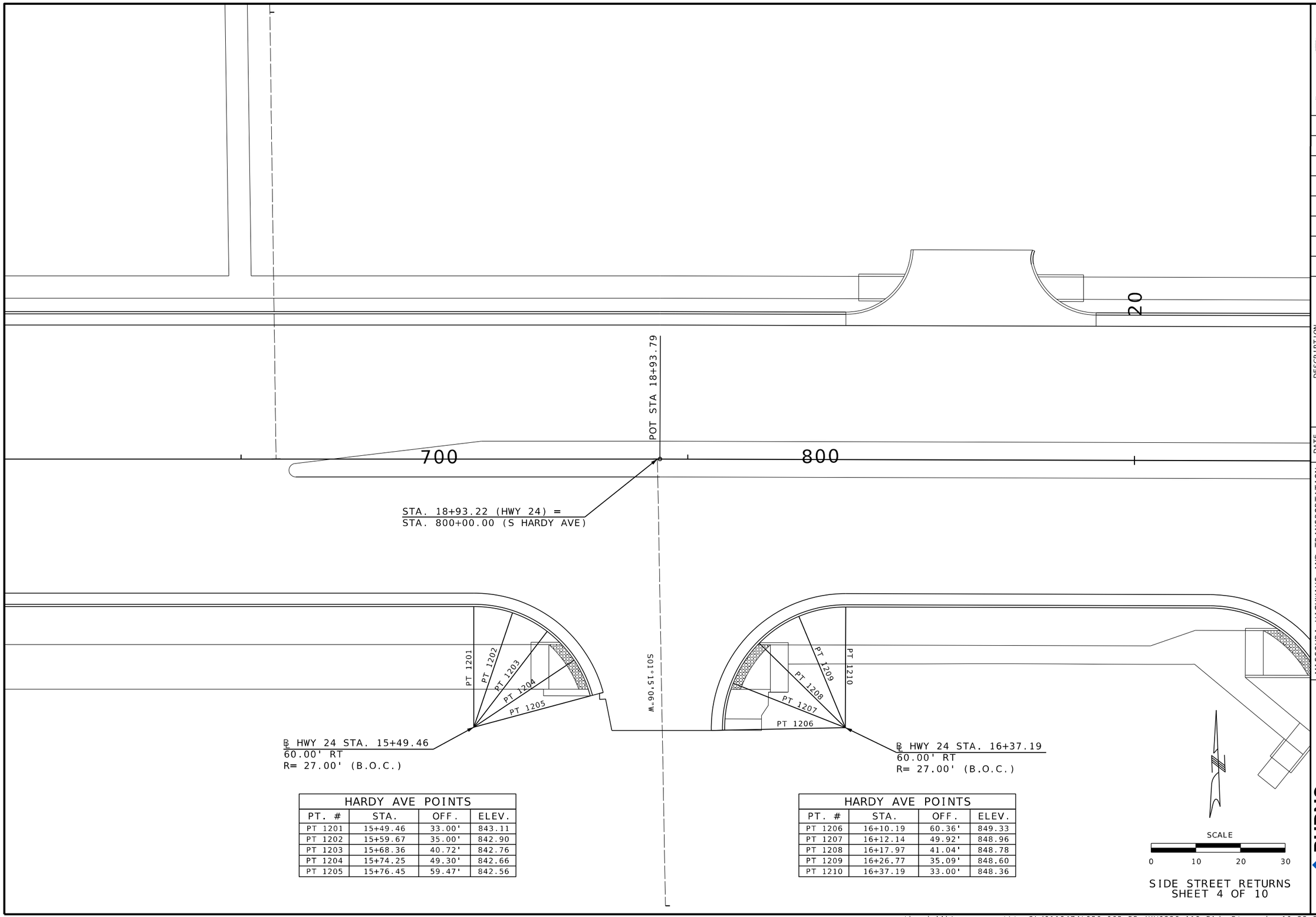

HARDY AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1201	15+49.46	33.00'	843.11
PT 1202	15+59.67	35.00'	842.90
PT 1203	15+68.36	40.72'	842.76
PT 1204	15+74.25	49.30'	842.66
PT 1205	15+76.45	59.47'	842.56

HARDY AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1206	16+10.19	60.36'	849.33
PT 1207	16+12.14	49.92'	848.96
PT 1208	16+17.97	41.04'	848.78
PT 1209	16+26.77	35.09'	848.60
PT 1210	16+37.19	33.00'	848.36

SIDE STREET RETURNS
SHEET 4 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	59

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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DESCRIPTION

DATE

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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HARDY AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1311	20+94.84	33.00'	838.17
PT 1312	21+04.33	34.72'	838.08
PT 1313	21+12.61	39.67'	838.11
PT 1314	21+18.62	47.22'	838.27
PT 1315	21+21.60	56.40'	838.55

HARDY AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1316	21+49.91	60.43'	838.34
PT 1317	21+51.84	49.97'	837.92
PT 1318	21+57.67	41.06'	837.52
PT 1319	21+66.48	35.10'	837.22
PT 1320	21+76.91	33.00'	837.02

℄ HWY 24 STA. 20+94.81
60.00' LT
R= 27.00' (B.O.C.)

PT 1315
PT 1314
PT 1313
PT 1312
PT 1311

S02°26'44"W

20

PT 1316
PT 1317
PT 1318
PT 1319
PT 1320

℄ HWY 24 STA. 21+76.91
60.00' LT
R= 27.00' (B.O.C.)

STA. 21+35.24 (HWY 24) =
STA. 1000+00.00 (S HARDY AVE)

900

1000

S87°33'16"E

STA. 20+59.26 (HWY 24) =
STA. 900+00.00 (S LAKE DR)

PT 1301
PT 1302
PT 1303
PT 1304
PT 1305

S02°26'44"W

PT 1310
PT 1309
PT 1308
PT 1307
PT 1306

℄ HWY 24 STA. 20+17.09
60.00' RT
R= 27.00' (B.O.C.)

℄ HWY 24 STA. 20+99.81
60.00' RT
R= 27.00' (B.O.C.)

LAKE DR POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1301	20+17.09	33.00'	839.31
PT 1302	20+27.42	35.06'	839.13
PT 1303	20+36.18	40.91'	838.95
PT 1304	20+42.03	49.67'	838.84
PT 1305	20+44.09	60.00'	838.79

LAKE DR POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1306	20+73.01	63.31'	838.72
PT 1307	20+74.02	52.01'	838.83
PT 1308	20+79.58	42.12'	838.63
PT 1309	20+88.72	35.38'	838.44
PT 1310	20+99.81	33.00'	838.25

SCALE
0 10 20 30

SIDE STREET RETURNS
SHEET 5 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	60

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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WILLOW AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1411	24+09.72	33.00'	832.46
PT 1412	24+19.23	34.73'	832.14
PT 1413	24+27.52	39.69'	831.84
PT 1414	24+33.48	47.26'	831.83
PT 1415	24+36.41	56.46'	832.18

℄ HWY 24 STA. 24+09.72
60.00' LT
R= 27.00' (B.O.C.)

WILLOW AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1416	24+65.10	60.41'	831.86
PT 1417	24+67.27	49.93'	831.15
PT 1418	24+73.33	41.13'	830.51
PT 1419	24+82.32	35.42'	829.90
PT 1420	24+92.82	33.69'	829.34

℄ HWY 24 STA. 24+91.77
60.67' LT
R= 27.00' (B.O.C.)

PT 1411 PT 1412 PT 1413 PT 1414 PT 1415

PT 1416 PT 1417 PT 1418 PT 1419 PT 1420

S02°41'53"W

25

STA. 23+23.86 (HWY 24) =
STA. 1100+00.00 (E 6th ST)

PC STA 24+29.00

1100

1200

STA. 24+51.03 (HWY 24) =
STA. 1200+00.00 (S WILLOW AVE)

S02°26'44"W

PT 1401 PT 1402 PT 1403 PT 1404 PT 1405

PT 1406 PT 1407 PT 1408 PT 1409 PT 1410

R 2'

R 2'

S33°51'58"E

℄ HWY 24 STA. 22+80.66
60.00' RT
R= 27.00' (B.O.C.)

6TH ST POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1401	22+84.63	33.29'	835.89
PT 1402	22+90.63	34.91'	835.77
PT 1403	22+96.10	37.85'	835.72
PT 1404	23+00.76	41.97'	835.71
PT 1405	23+04.35	47.04'	835.72

℄ HWY 24 STA. 23+64.33
60.00' RT
R= 27.00' (B.O.C.)

6TH ST POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1406	23+39.79	48.76'	835.06
PT 1407	23+43.94	42.30'	834.93
PT 1408	23+49.75	37.28'	834.74
PT 1409	23+56.73	34.09'	834.39
PT 1410	23+64.33	33.00'	834.16

SCALE
0 10 20 30

SIDE STREET RETURNS
SHEET 6 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	61

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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NORTHERN BLVD POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1511	26+92.84	39.00'	820.79
PT 1512	27+03.44	41.17'	820.32
PT 1513	27+12.34	47.32'	819.98
PT 1514	27+18.10	56.48'	819.94
PT 1515	27+19.81	67.16'	820.17

℄ HWY 24 STA. 26+92.84
60.00' LT
R= 27.00' (B.O.C.)

PT 1511
PT 1512
PT 1513
PT 1514
PT 1515

S01°47'00"W

NORTHERN BLVD POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1516	27+61.11	65.01'	819.42
PT 1517	27+63.44	54.99'	818.86
PT 1518	27+69.35	46.56'	818.31
PT 1519	27+77.99	40.96'	817.75
PT 1520	27+88.09	39.00'	817.19

℄ HWY 24 STA. 27+70.19
66.00' LT
R= 27.00' (B.O.C.)

PT 1516
PT 1517
PT 1518
PT 1519
PT 1520

STA. 27+34.77 (HWY 24) =
STA. 1300+00.00 (S NORTHERN BLVD)

S85°48'42"E

1300

1300

PC STA 28+53.48

STA. 27+41.15 (HWY 24) =
STA. 1300+00.00 (S NORTHERN BLVD)

S04°11'18"W

NORTHERN BLVD POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1501	26+55.43	33.00'	XXX.XX
PT 1502	26+71.03	36.15'	XXX.XX
PT 1503	26+84.68	44.33'	XXX.XX
PT 1504	26+94.83	56.60'	XXX.XX
PT 1505	27+00.29	71.54'	XXX.XX

PT 1301
PT 1302
PT 1303
PT 1304
PT 1305

R 2'

℄ HWY 24 STA. 26+54.06
79.98' RT
R= 47.00' (B.O.C.)

PT 1506
PT 1507
PT 1508
PT 1509
PT 1510

℄ HWY 24 STA. 27+85.18
60.00' RT
R= 27.00' (B.O.C.)

NORTHERN BLVD POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1506	27+58.42	56.40'	818.24
PT 1507	27+61.39	47.22'	818.36
PT 1508	27+67.41	39.67'	818.32
PT 1509	27+75.69	34.72'	818.10
PT 1510	27+85.18	33.00'	817.81

SCALE
0 10 20 30

SIDE STREET RETURNS
SHEET 7 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	62

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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CARLISLE AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1601	33+78.79	27.00'	821.82
PT 1602	33+87.57	28.67'	822.08
PT 1603	33+95.14	33.43'	822.07
PT 1604	34+00.44	40.63'	821.75
PT 1605	34+02.73	49.27'	821.13

CARLISLE AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1606	34+33.09	48.82'	821.69
PT 1607	34+36.39	40.18'	822.98
PT 1608	34+42.42	33.16'	823.69
PT 1609	34+50.47	28.59'	824.21
PT 1610	34+59.59	27.00'	824.72

℄ HWY 24 STA. 33+78.79
51.00' LT
R= 24.00' (B.O.C.)

PT 1605
PT 1604
PT 1603
PT 1602
PT 1601

S04°11'18"W

℄ HWY 24 STA. 34+59.59
54.00' LT
R= 27.00' (B.O.C.)

PT 1606
PT 1607
PT 1608
PT 1609
PT 1610

35

POT STA 35+27.62

1400

STA. 34+17.00 (HWY 24) =
STA. 1400+00.00 (S CARLISLE AVE)

:5"E

SCALE
0 10 20 30

SIDE STREET RETURNS
SHEET 8 OF 10

STATE OF MISSOURI
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24	MO
DISTRICT	SHEET NO.
KC	63

COUNTY
JACKSON

JOB NO.
JKU0226

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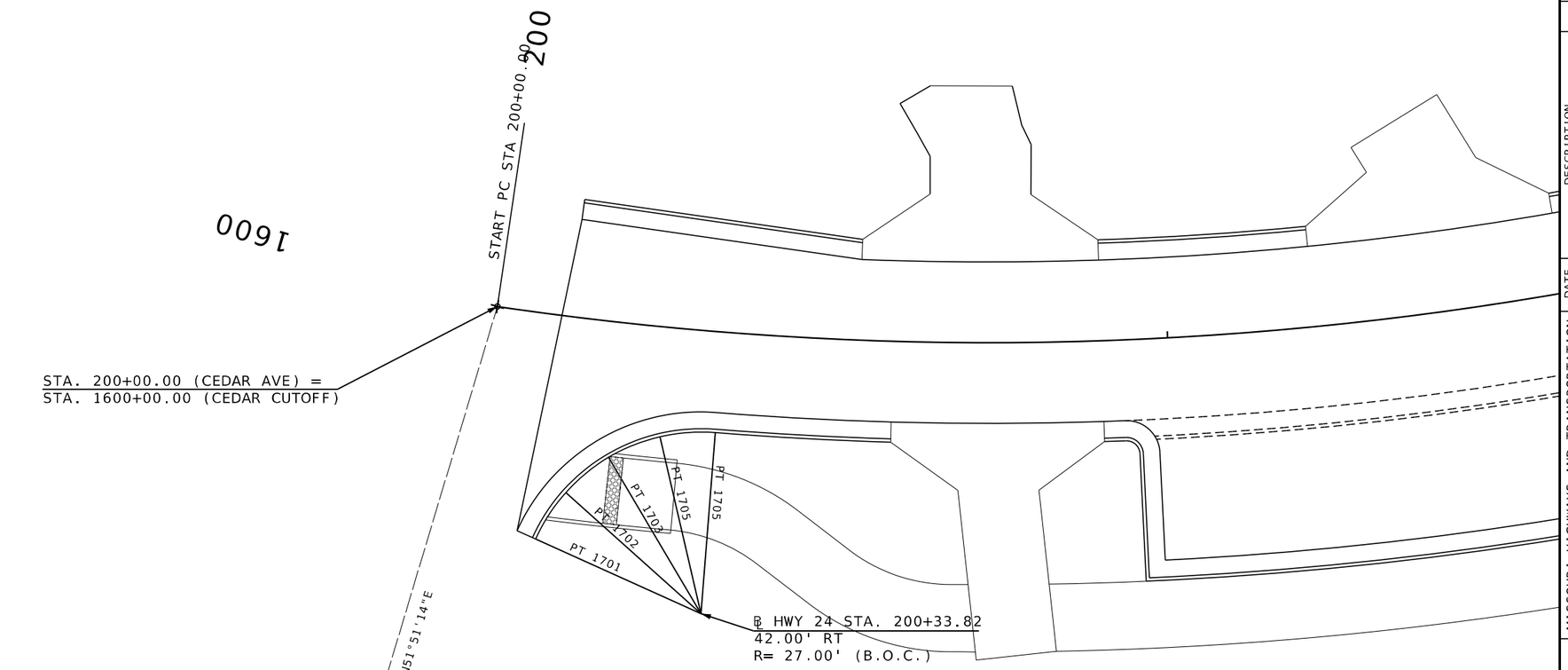

CEDAR CUTOFF POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1701	200+10.00	33.48'	835.48
PT 1702	200+13.41	26.07'	835.91
PT 1703	200+18.89	20.15'	836.20
PT 1704	200+25.94	16.32'	836.33
PT 1705	200+33.82	15.00'	836.31

SCALE

0 10 20 30

SIDE STREET RETURNS
SHEET 9 OF 10

STATE OF MISSOURI
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24	MO
DISTRICT	SHEET NO.
KC	64

COUNTY
JACKSON

JOB NO.
JKU0226

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PROJECT NO.

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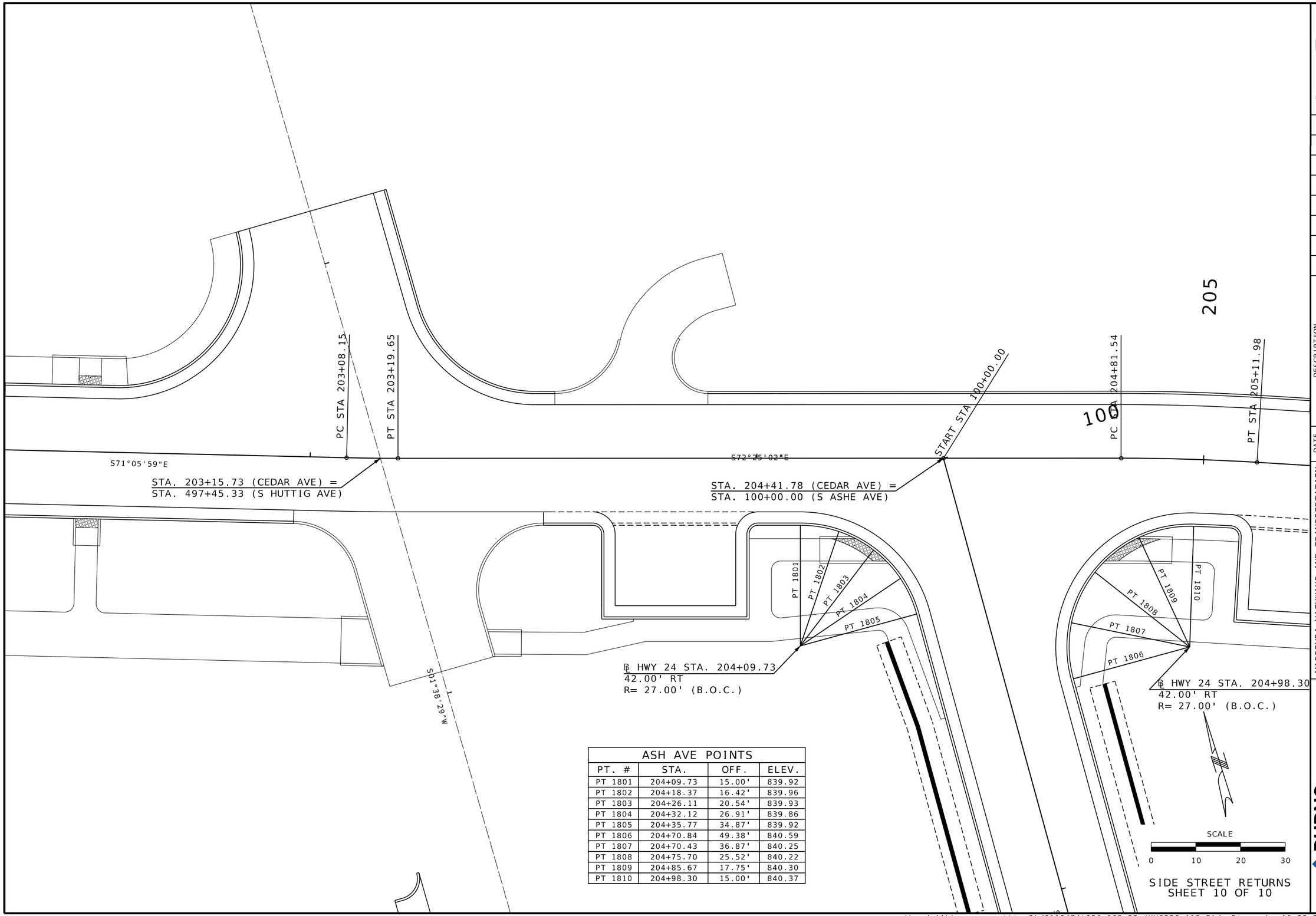

ASH AVE POINTS			
PT. #	STA.	OFF.	ELEV.
PT 1801	204+09.73	15.00'	839.92
PT 1802	204+18.37	16.42'	839.96
PT 1803	204+26.11	20.54'	839.93
PT 1804	204+32.12	26.91'	839.86
PT 1805	204+35.77	34.87'	839.92
PT 1806	204+70.84	49.38'	840.59
PT 1807	204+70.43	36.87'	840.25
PT 1808	204+75.70	25.52'	840.22
PT 1809	204+85.67	17.75'	840.30
PT 1810	204+98.30	15.00'	840.37

SIDE STREET RETURNS
SHEET 10 OF 10

STATE OF MISSOURI
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24	MO
DISTRICT	SHEET NO.
KC	65

COUNTY JACKSON

JOB NO. JKU0226

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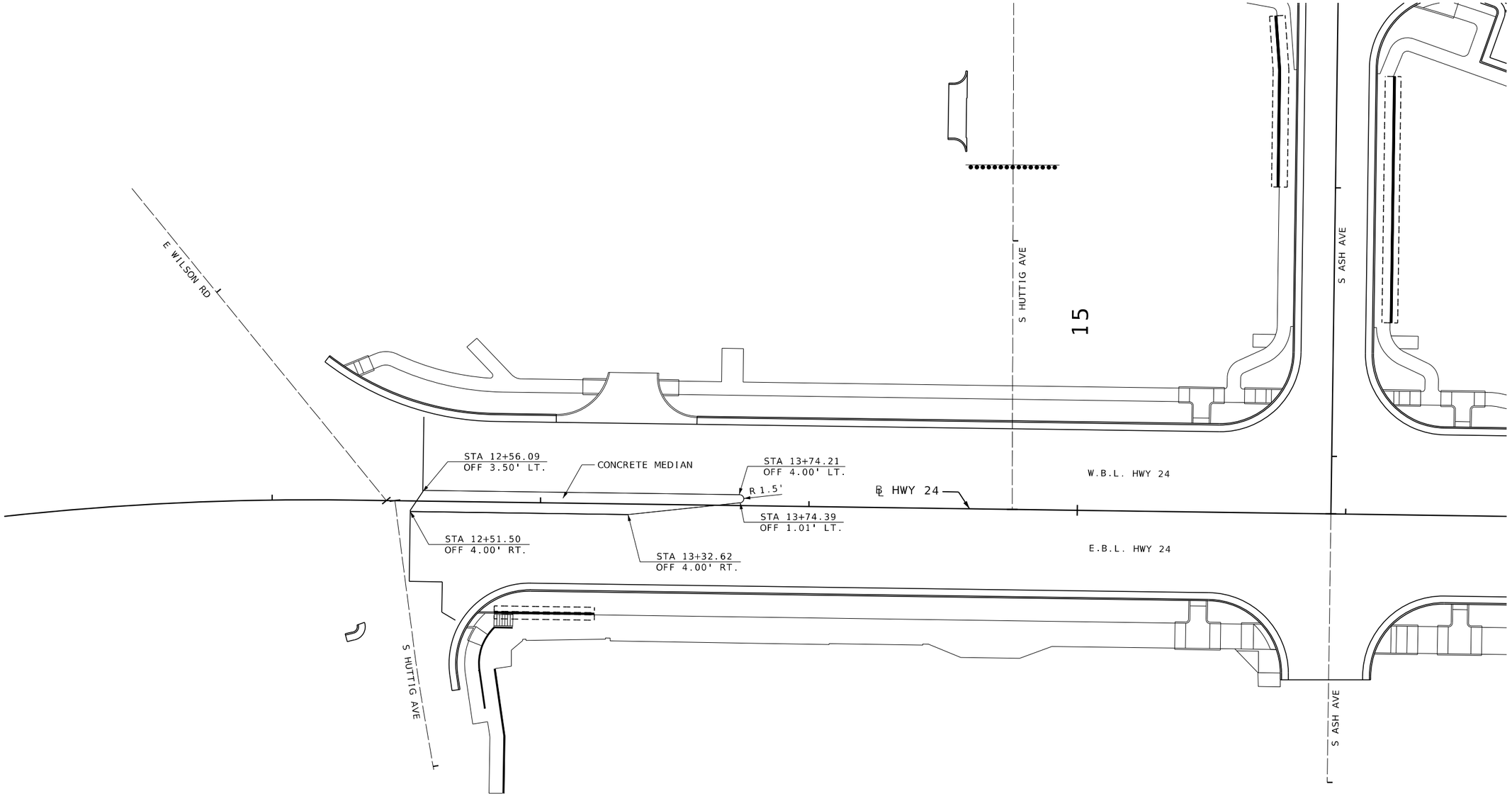

CONCRETE MEDIAN
SHEET 1 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	66

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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REV.	DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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JEFFERSON CITY, MO 65102
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Kansas City, MO 64114
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Certificate of Authority
No.: 000165

SCALE

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CONCRETE MEDIAN
SHEET 2 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	67

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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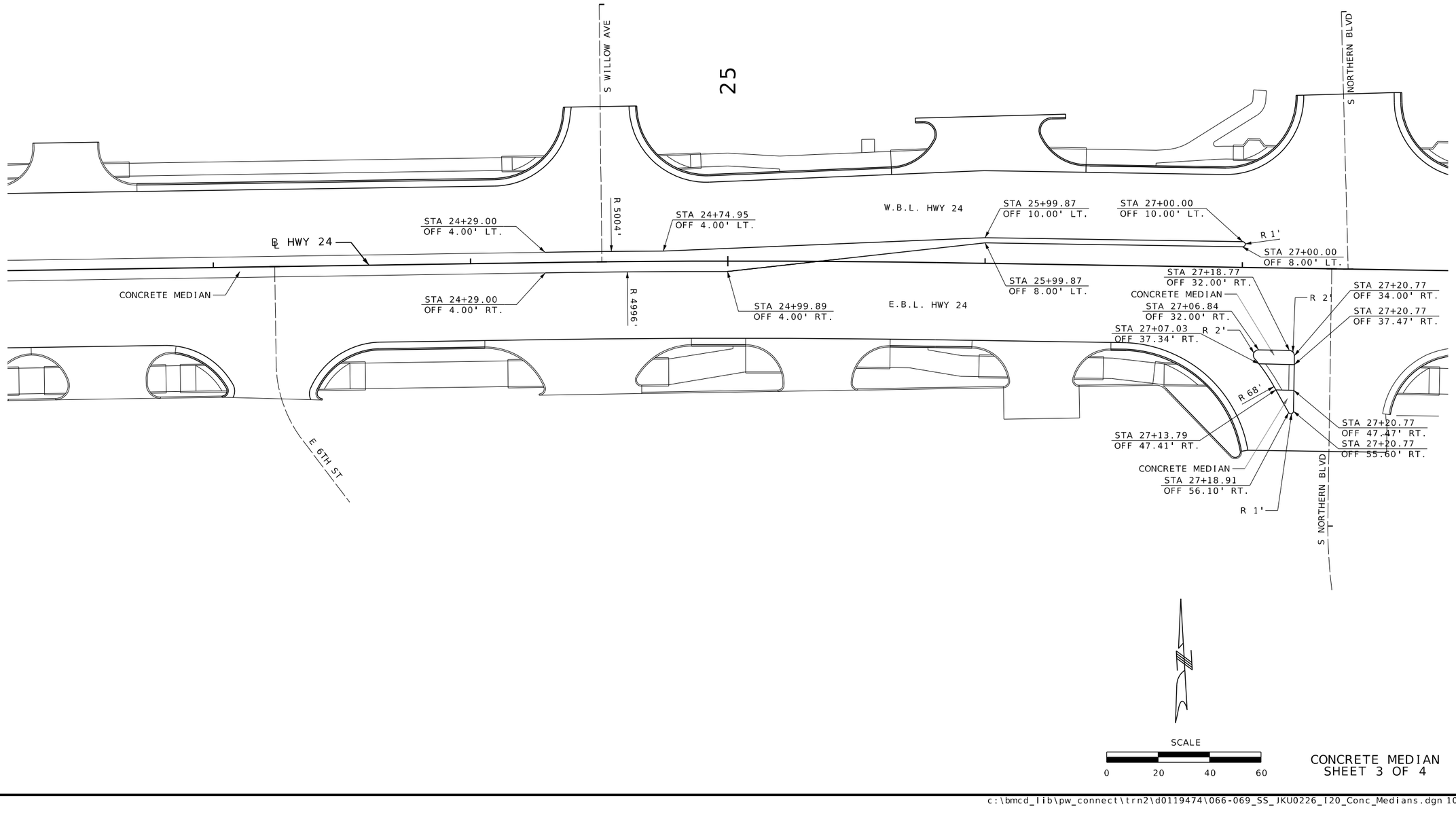

CONCRETE MEDIAN
SHEET 3 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	68

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
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No.: 000165

SCALE

0 20 40 60

CONCRETE MEDIAN
SHEET 4 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	69

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

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DESCRIPTION	DATE

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WO4-1aL

R11-4

WO20-5

GO20-2

R9-11R

R9-11L

R9-9

WO20-1

WO20-1

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- FLAGGER
- CONE
- CHANNELIZER
- BARRICADE
- CHANGEABLE MESSAGE BOARD
- TRAFFIC FLOW INDICATORS

GENERAL NOTES:

1. ANY EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.
2. ALTERNATE TRAFFIC CONTROL MAY BE USED AS NEEDED AT THE APPROVAL OF THE ENGINEER.
3. NO DIRECT PAYMENT WILL BE MADE FOR THE RELOCATION OF CHANNELIZERS, CONST. SIGNS, OR FLASHING ARROW PANEL.
4. NO DIRECT PAYMENT WILL BE MADE FOR TEMPORARY STOP OR YIELD SIGNS AS NEEDED TO MAINTAIN EXISTING STOP/YIELD CONDITIONS AS APPROVED BY THE ENGINEER.
5. ALL SIGNS ARE TO BE PORTABLE MOUNT AND ARE TO BE MOVED AS WORK PROGRESSES, UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING PROPER TRAFFIC CONTROL SETUPS THROUGHOUT CONSTRUCTION AS DESCRIBED IN THESE PLANS OR AS APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
7. WHERE MINIMUM LANE WIDTHS CANNOT BE ACHIEVED ON THE SIDE STREETS, THE CONTRACTOR SHALL CLOSE HALF OF THE APPROACH AND POSITION A FLAGGER AT EACH END OF THE WORK AREA. LOCATION TO BE DETERMINED BY THE ENGINEER. ADVANCE FLAGGER SIGNING SHALL BE INSTALLED AS OUTLINED IN THE MUTCD AND SHALL BE INCIDENTAL TO OTHER TRAFFIC CONTROL PAY ITEMS.
8. THE CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS TO ALL BUSINESSES AND STREETS. NO STREET OR ENTRANCE SHALL BE COMPLETELY BLOCKED.
9. ALL PEDESTRIAN TRAFFIC CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE CURB RAMP & SIDEWALK IS OPENED FOR PEDESTRIAN TRAVEL.
10. PEDESTRIAN TRAFFIC CONTROL SIGNS MAY BE MOUNTED ON PORTABLE MOUNTS AT 1 FT. PROVIDED THEY DO NOT INTERFERE WITH PEDESTRIAN MOVEMENT OR BE OBSTRUCTED BY PARKING. OTHERWISE SIGNS SHALL BE MOUNTED AT 7 FT.
11. SPACING & DISTANCES OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD & APPROVED BY THE ENGINEER.
12. NO WORK SHALL OCCUR MONDAY THROUGH FRIDAY FROM 6AM TO 8AM ON US24 EB, AND FROM 4PM TO 6PM ON US24 WB.
13. FOR TRAFFIC CONTROL RELATED TO RRFB RAISED ISLAND CONSTRUCTION, SEE SHEET $TC44$
14. FOR TRAFFIC CONTROL RELATED TO CROSSROAD PIPE INSTALLATION, SEE SHEET $TC45$

TRAFFIC CONTROL
GENERAL NOTES & LEGEND
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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24	MO
DISTRICT	SHEET NO.
KC	70

COUNTY JACKSON

JOB NO. JKU0226

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REV.

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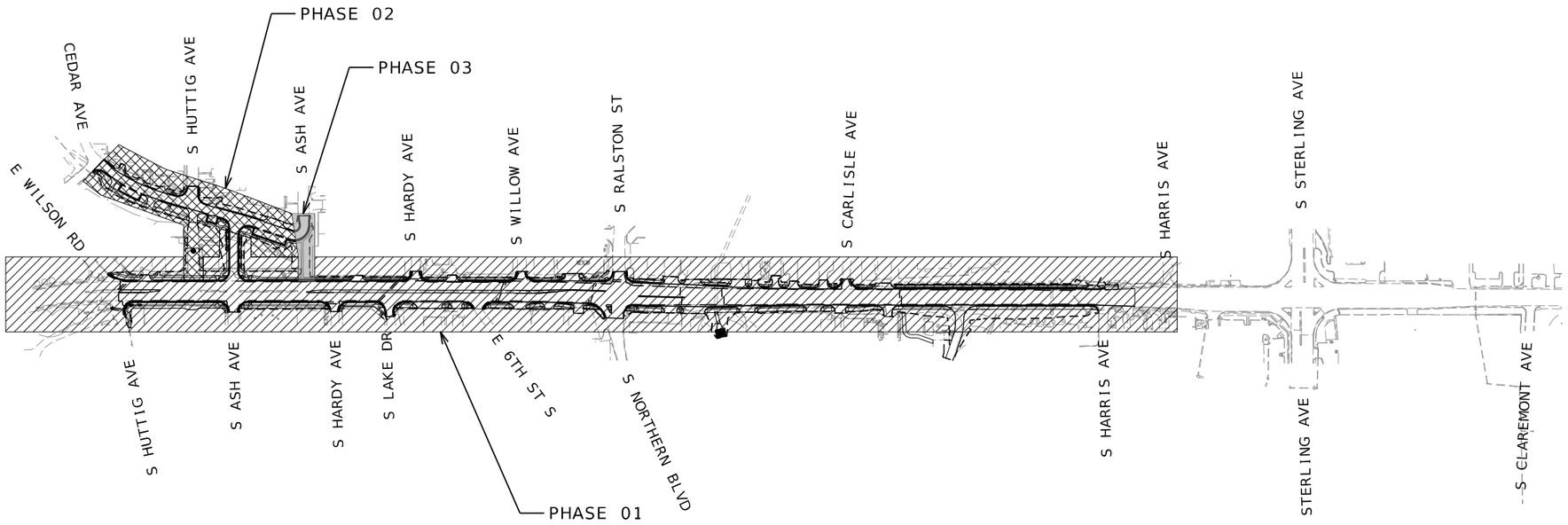
PHASING LEGEND

PHASE 01- CONSTRUCT HWY 24 IMPROVEMENTS ON BOTH NORTH AND SOUTH SIDES. PARTIAL CONSTRUCTION OF THE NEW ASH AVE ALIGNMENT NORTH TO EXISTING CEDAR AVE LOCATION. LEAVE EXISTING HUTTIG AVE AND EXISTING ASH AVE INTERSECTION LOCATIONS OPEN TO THRU TRAFFIC DURING PHASE 01 CONSTRUCTION.

PHASE 02- CONSTRUCT NEW CEDAR AVE IMPROVEMENTS TO EXISTING ASH AVE INTERSECTION TO THE EAST. TIE IN NEW ASH AVE INTERSECTION TO NEW CEDAR AVE IMPROVEMENTS. CLOSE CEDAR AVE AND HUTTIG AVE TO THRU TRAFFIC, REMOVE EXISTING HUTTIG AVE ROADWAY BETWEEN NEW CEDAR AVE AND HWY 24. FINISH IMPROVEMENTS AT EXISTING HUTTIG AVE AND HWY 24 INTERSECTION. EXISTING ASH AVE TO REMAIN OPEN TO THRU TRAFFIC DURING PHASE 02 CONSTRUCTION.

PHASE 03- CONSTRUCT REMAING IMPROVEMENTS TO CONNECT NEW CEDAR AVE TO EXISTING ASH AVE. FINISH IMPROVEMENTS AT EXISTING ASH AVE AND HWY 24 INTERSECTION AND REMOVE EXISTING ASH AVE ROADWAY BETWEEN HWY 24 AND NEW IMPROVEMENTS.



SCALE
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TRAFFIC CONTROL
WORK PHASING SEGMENTS
SHEET 1 OF 1

STATE OF MISSOURI
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24	MO
DISTRICT	SHEET NO.
KC	71

COUNTY JACKSON

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MoDOT

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TRAFFIC CONTROL
PHASE 01
SHEET 01 OF 10

MATCHLINE STA. 6+40.00

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	72

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA

MATCHLINE STA. 6+40.00

7+00

W020-1A

MERGE

7+96

G020-2

END ROAD WORK

W020-1

ROAD WORK AHEAD

10

11+41

W020-1

ROAD WORK AHEAD

W.B.L. HWY 24

E.B.L. HWY 24

℄ HWY 24

40' (TYP.)

7+96

245'
7 @ 35' SPACING

10+46

10+33

MATCHLINE STA. 11+44.00

SCALE
0 20 40 60

TRAFFIC CONTROL
PHASE 01
SHEET 02 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	73

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

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MATCHLINE STA. 11+44.00

MATCHLINE STA. 17+00.00

E WILSON RD

S HUTTIG AVE

S ASH AVE

15

℄ HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

11+55

12+73

12+80

12+99

12+96

14+33

14+51

15+18

15+49

16+37

16+20

30'

40' (TYP.)

20'

10'

BENCHMARK EL=851.09

GP 308

ROAD WORK AHEAD

WO20-1

GRAVEL

SPIRE PIPELINE

GATE

6" WOOD

CONCRETE

2" PL LP

4" DIA METAL TRANSMISSION POLE WITH 6" DIA CONCRETE PAD

STEEL POST

ASPHALT

30" DEAD TREE

DISCONNECTED GAS METERS

RIP RAP

36" ELM

12" PEAR

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA

SCALE

0 20 40 60

TRAFFIC CONTROL
PHASE 01
SHEET 03 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	74

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

MATCHLINE STA. 17+00.00

MATCHLINE STA. 22+60.00

S ASH AVE EXIST

S HARDY AVE

S LAKE DR

W.B.L. HWY 24

E.B.L. HWY 24

℄ HWY 24

20

17+79

17+70

18+43

18+52

19+29

20+17

20+98

21+00

21+17

21+78

86+02

CP 307

32'

15'

40' (TYP.)

8'

ROAD WORK AHEAD

WO20-1

BOLLARDS

3" DIA STEEL TRANSMISSION POLE

WITHOUT LIGHT

6' CHAINLINK STONE RETAINING WALL

CONCRETE

8" PEAR

TRANSMISSION POLE

5" ORNAMENTAL

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA

SCALE

0 20 40 60

TRAFFIC CONTROL
PHASE 01
SHEET 04 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	8/4/2025
ROUTE	24
STATE	MO
DISTRICT	KC
SHEET NO.	75
COUNTY	JACKSON
JOB NO.	JKU0226
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)

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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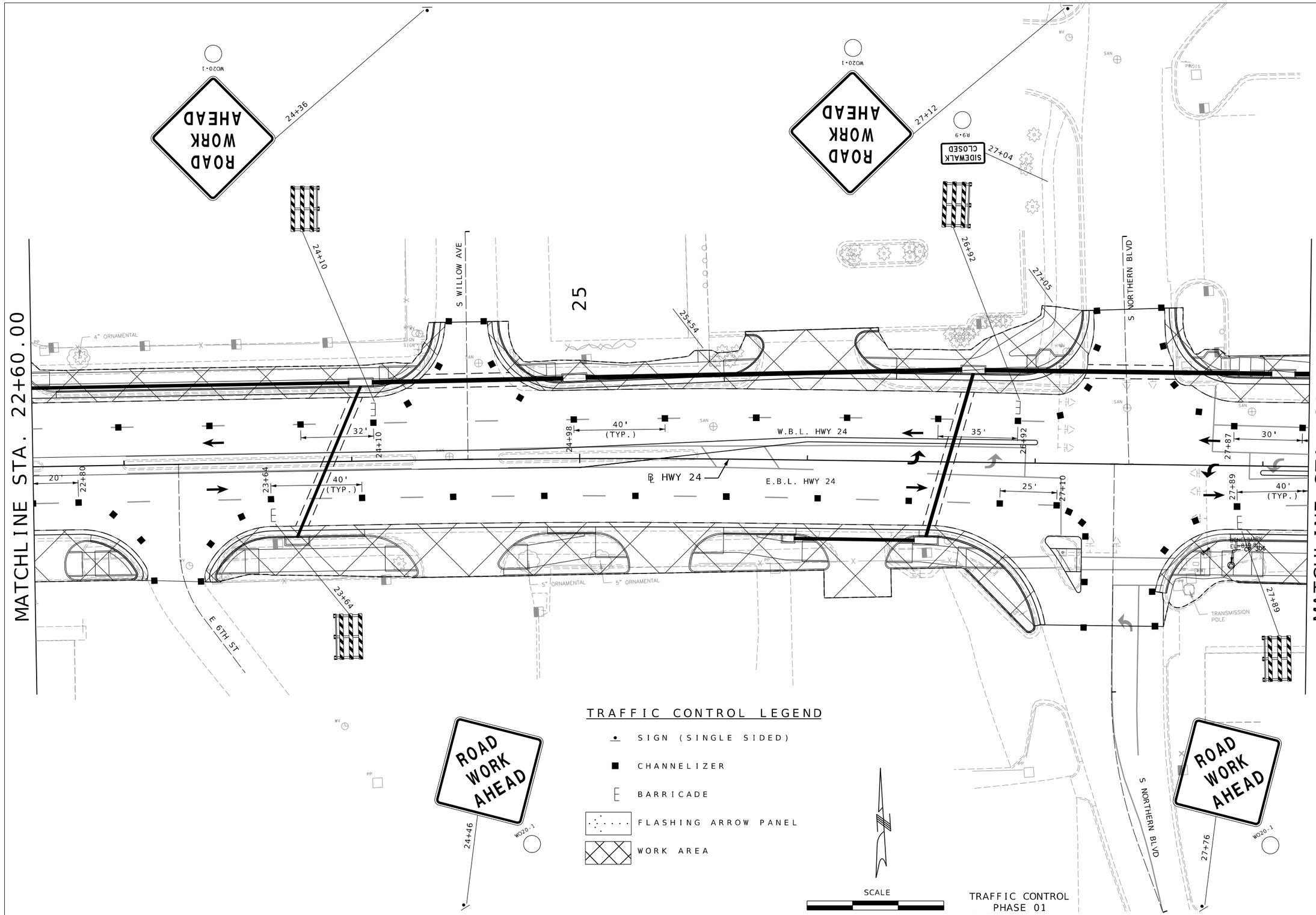

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	8/4/2025
ROUTE	24
STATE	MO
DISTRICT	KC
SHEET NO.	76
COUNTY	JACKSON
JOB NO.	JKU0226
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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certifcate of Authority
No.: 000165

REV.

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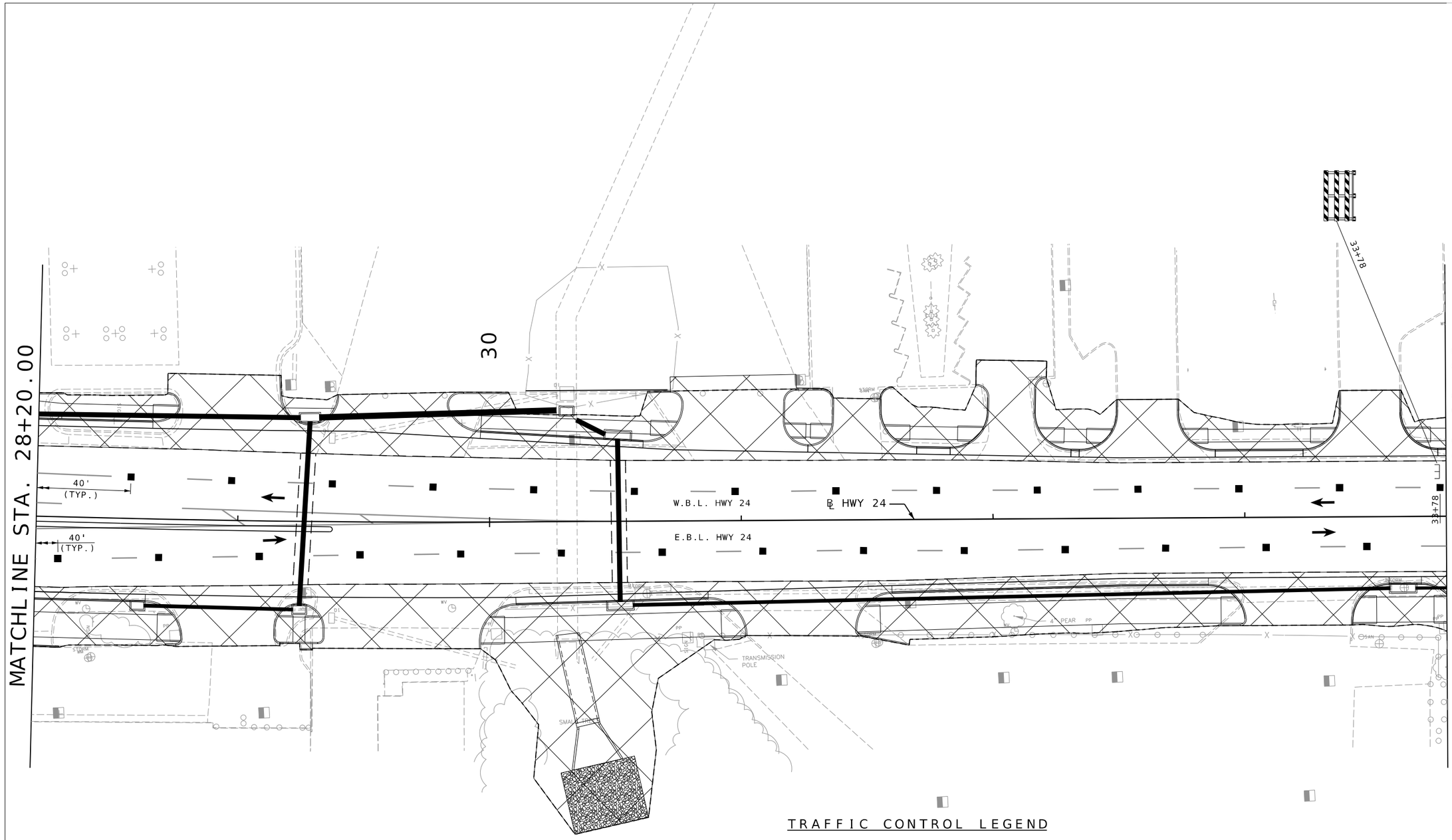

TRAFFIC CONTROL
PHASE 01
SHEET 06 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	77

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

MATCHLINE STA. 33+80.00

MATCHLINE STA. 39+40.00

S CARLISLE AVE

35

34+13

34+62

W020-1

ROAD WORK AHEAD

34+58

40' (TYP.)

℄ HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

40' (TYP.)

35+18

SMALL TREES

BILLBOARD

5' DIA STEEL TRANSMISSION POLE

TRANSMISSION POLE

ASPHALT WITH UCT

2" PEAR

3" MAPLE

3" MAPLE

ASPHALT

6" WOOD

3" PEAR

3" PEAR

SANITARY CLEAN OUT

CONCRETE

HOUSE

WINDOW WELL

10" CRABAPPLE

FLOWER BED

6" CRABAPPLE

6" CRABAPPLE

DUMPSTER

GATE CONCRETE

ASPHALT

3" PEAR

3" PEAR

5" PEAR

26" ASH

15"

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA

SCALE

0 20 40 60

TRAFFIC CONTROL
PHASE 01
SHEET 07 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	78

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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MATCHLINE STA. 39+40.00

MATCHLINE STA. 45+00.00

W.B.L. HWY 24

E.B.L. HWY 24

℄ HWY 24

40' (TYP.)

40' (TYP.)

30'

40' (TYP.)

100' 5 MIN. @ EQ. SP.

245' 7 @ 35' SPACING

41+18

42+28

43+08

44+08

44+17

41+99

42+28

43+18

43+36

SIDEWALK CLOSED R9-9

CP 305

TRANSMISSION POLE

SWEETGUM

28" MAPLE

24" ASH

28" MAPLE

20" MAPLE

15" OAK

18" OAK

8" PEAR

6" PEAR

8" PEAR

5" ORNAMENTAL

15" ASH

6" MAPLE

TRANSMISSION POLE

ROAD WORK AHEAD

WO20-1

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA

SCALE

0 20 40 60

TRAFFIC CONTROL
PHASE 01
SHEET 08 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	79

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION

DATE

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

MATCHLINE STA. 45+00.00

MATCHLINE STA. 50+60.00

ROAD WORK AHEAD
W020-1
47+35

BERMA CLOSED AHEAD CROSS HERE
R9-11L
47+37

245'
7 @ 35' SPACING
46+62

W.B.L. HWY 24

E.B.L. HWY 24

℄ HWY 24

S STERLING AVE

MERGE
W04-1aL
48+25

RIGHT LANE CLOSED
W020-6a
50+14

BENCHMARK
EL=895.87

CP 304

TRANSMISSION POLE

END ROAD WORK
G020-2
46+57

BERMA CLOSED AHEAD CROSS HERE
R9-11R
47+05

12" ORNAMENTAL

ROAD WORK AHEAD
WO20-1
48+19

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA

SCALE
0 20 40 60

TRAFFIC CONTROL
PHASE 01
SHEET 09 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	80

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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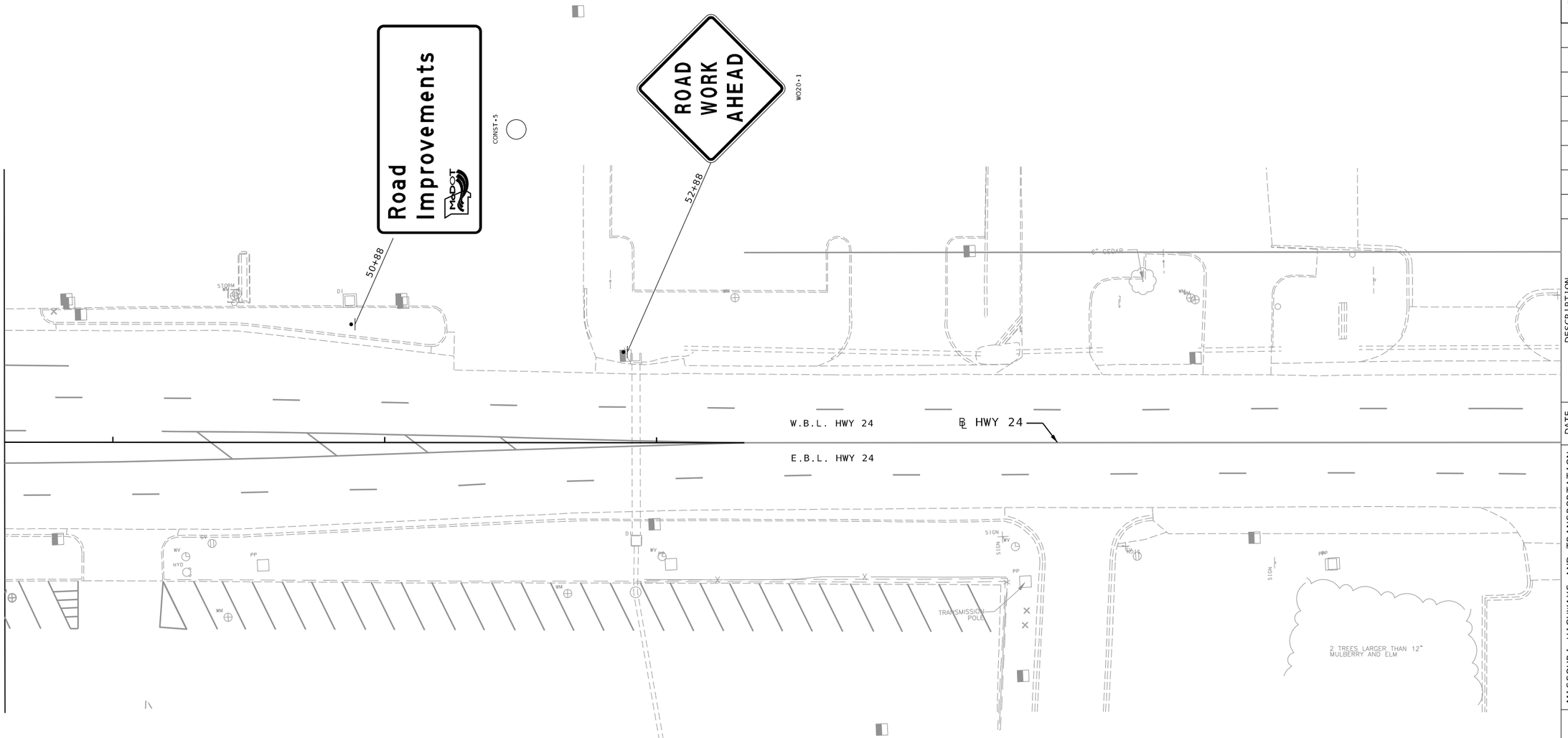
MATCHLINE STA. 50+60.00



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA

SCALE
0 20 40 60

TRAFFIC CONTROL
PHASE 01
SHEET 10 OF 10

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	81

COUNTY JACKSON
JOB NO. JKU0226
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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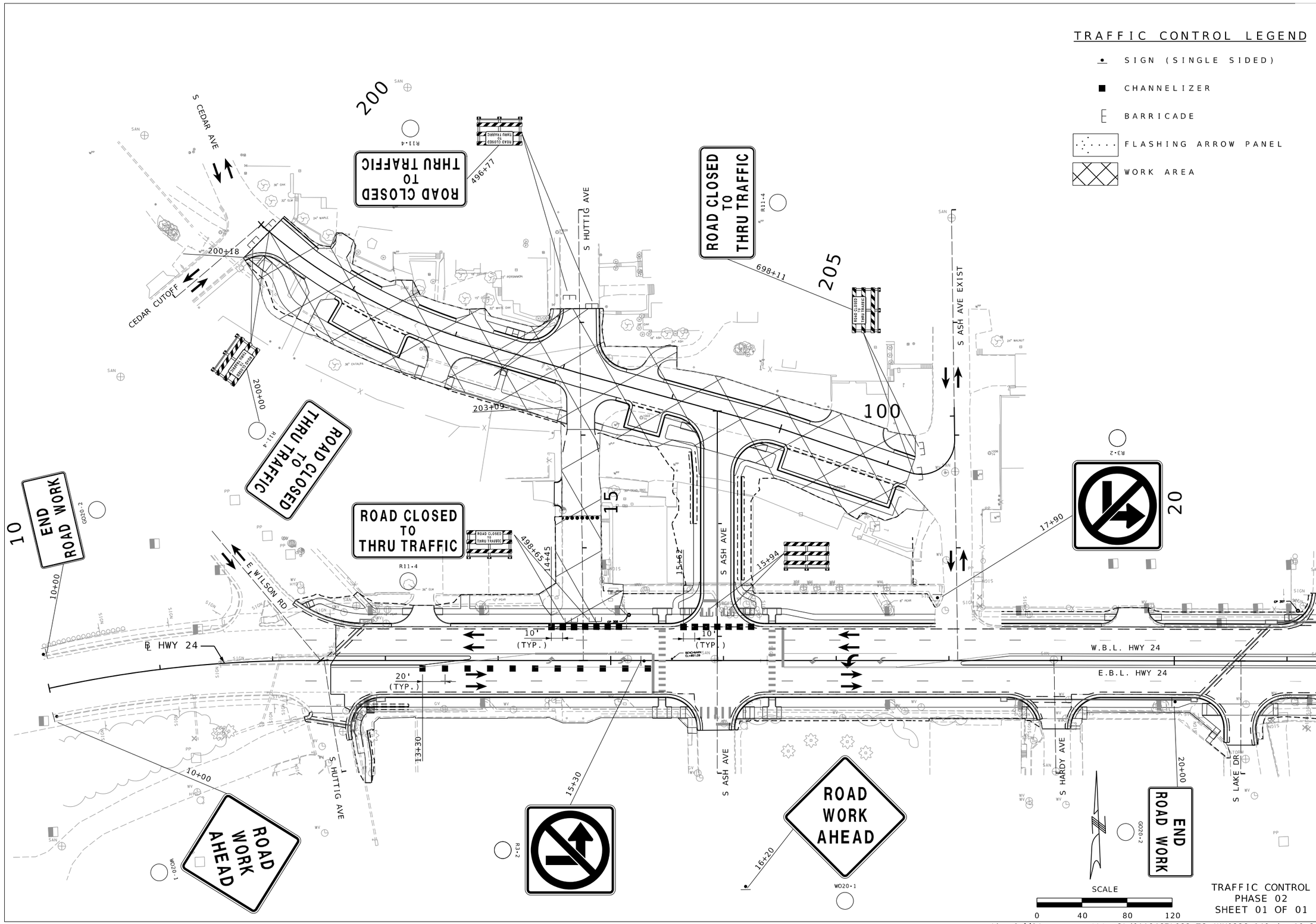
TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA



TRAFFIC CONTROL
PHASE 02
SHEET 01 OF 01

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	82

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

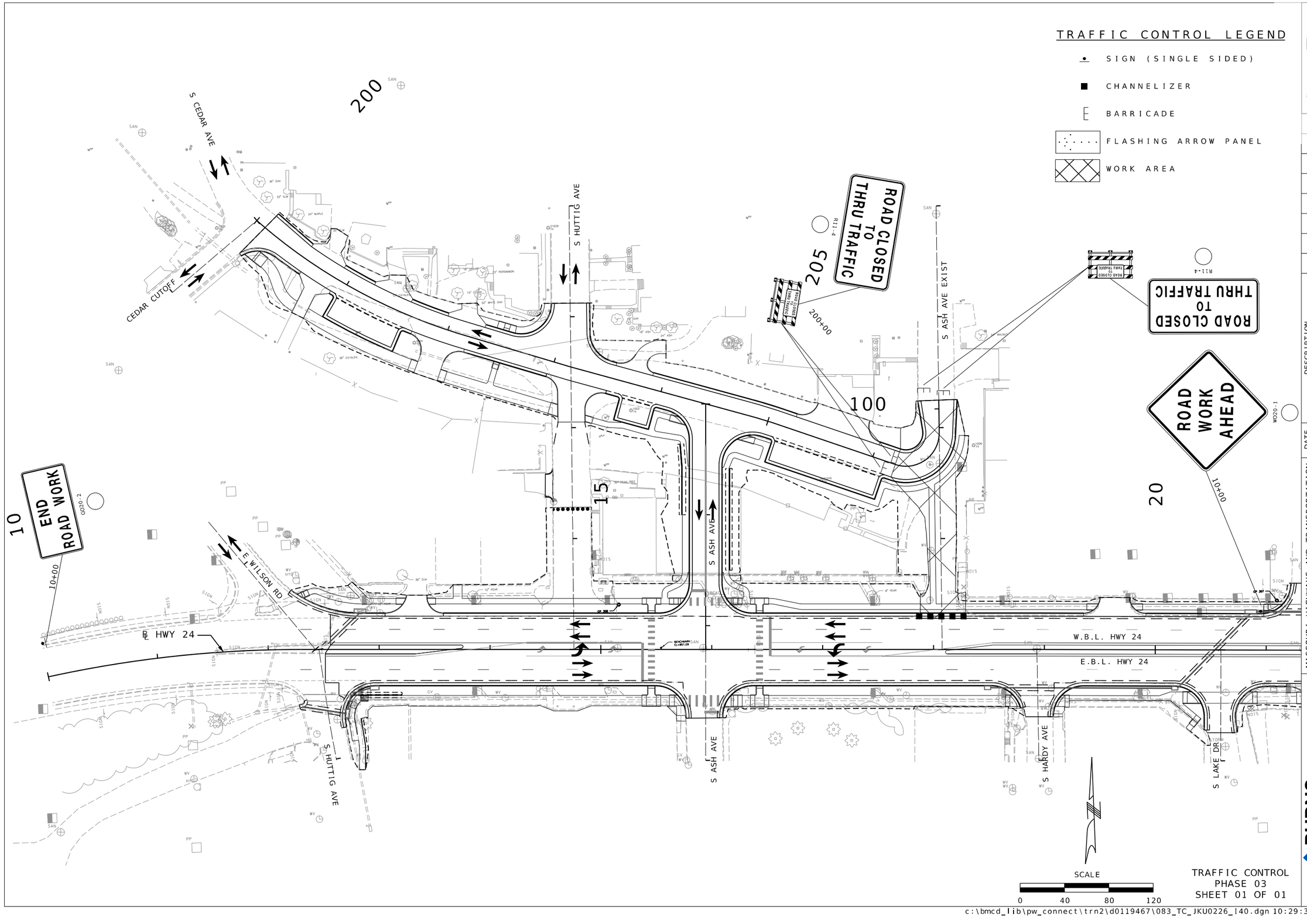
REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE
- FLASHING ARROW PANEL
- WORK AREA



TRAFFIC CONTROL
PHASE 03
SHEET 01 OF 01

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	8/4/2025
ROUTE	24
STATE	MO
DISTRICT	KC
SHEET NO.	83
COUNTY	JACKSON
JOB NO.	JKU0226
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

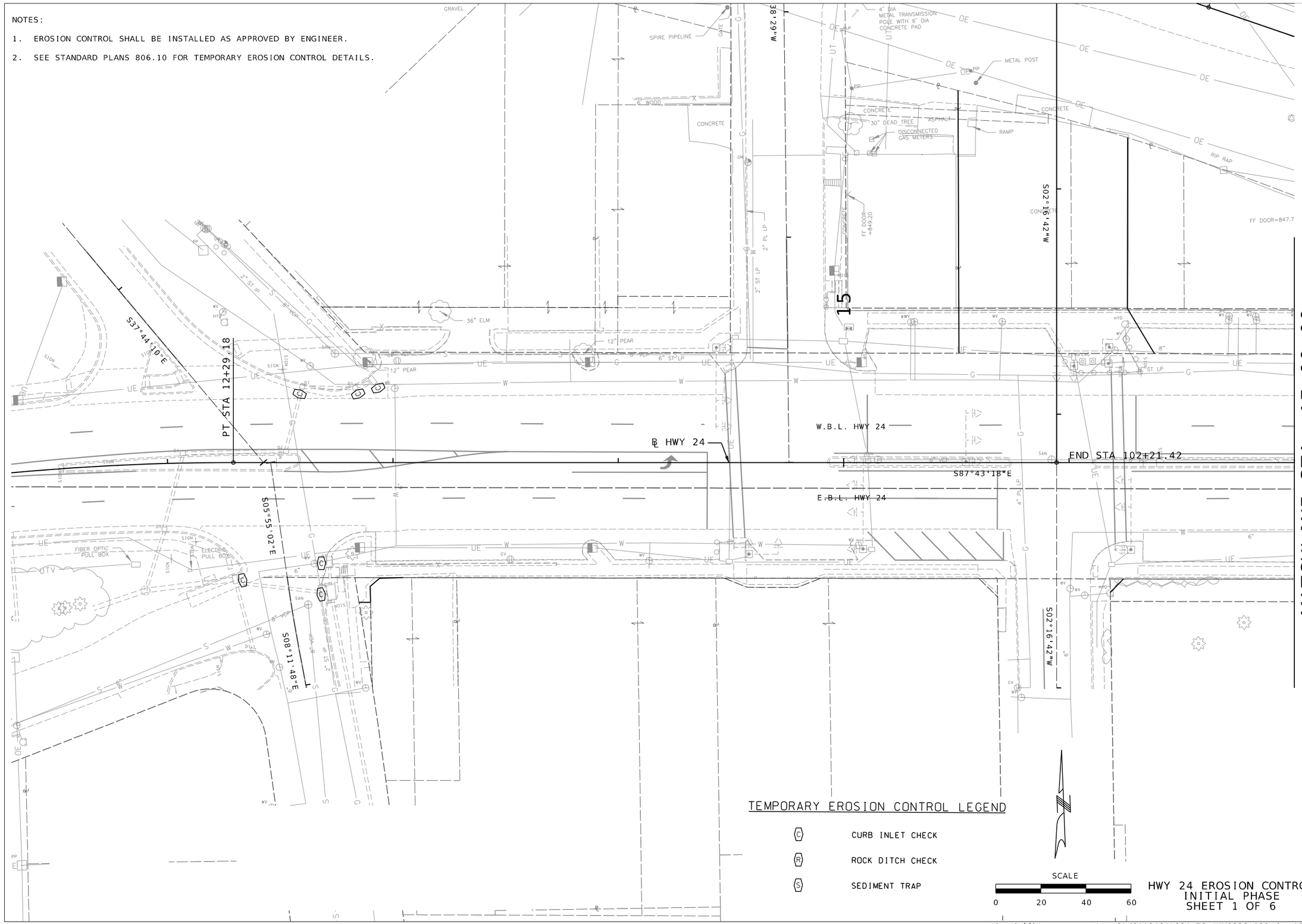
REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

NOTES:

1. EROSION CONTROL SHALL BE INSTALLED AS APPROVED BY ENGINEER.
2. SEE STANDARD PLANS 806.10 FOR TEMPORARY EROSION CONTROL DETAILS.



STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	84

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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MATCHLINE STA. 17+00.00

MATCHLINE STA. 22+60.00

PT STA 206+78.69

PC STA 206

S68°55'47"E

N28°45'W

POT STA 18+93.79

W.B.L. HWY 24

℄ HWY 24

E.B.L. HWY 24

S87°33'16"E

S02°26'44"W

S01°13'06"W

S02°26'44"W

20

BOLLARDS

3" DIA STEEL TRANSMISSION POLE

WITHOUT LIGHT

CONCRETE

8" PEAR

TRANSMISSION POLE

3.5' DIA ATT MANHOLE WITH UNDERGROUND TELEPHONE MARKER

ORNAMENTAL

FIBER OPTIC PULL BOX

SPRINKLER VALVE

TRANSMISSION POLE

TEMPORARY EROSION CONTROL LEGEND

(C)	CURB INLET CHECK
(R)	ROCK DITCH CHECK
(S)	SEDIMENT TRAP

SCALE

0 20 40 60

HWY 24 EROSION CONTROL INITIAL PHASE SHEET 2 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	85

COUNTY JACKSON

JOB NO. JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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No.: 000165

REV.

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MATCHLINE STA. 22+60.00

MATCHLINE STA. 28+20.00

PC STA 24+29.00

PT STA 25+81.09

℄ HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

S02°41'53"W

S01°47'00"W

S04°11'18"W

S85°48'42"E

S02°26'44"W

S33°51'58"E

MGE UNDERGROUND GAS MARKER

ATT PULL BOX

SPIRE UNDERGROUND GAS MARKER

ELECTRIC PULL BOX

TRANSMISSION POLE

25

S16

TEMPORARY EROSION CONTROL LEGEND

(C)	CURB INLET CHECK
(R)	ROCK DITCH CHECK
(S)	SEDIMENT TRAP

SCALE

0 20 40 60

HWY 24 EROSION CONTROL INITIAL PHASE SHEET 3 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	86

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE	DESCRIPTION	REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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MATCHLINE STA. 28+20.00

MATCHLINE STA. 33+80.00

PC STA 28+53.48

PT STA 30+08.95

30

W.B.L. HWY 24

E.B.L. HWY 24

PI HWY 24

S87°35'35"E

SOUTHERN STAR CENTRAL GAS PIPELINE

SPIRE UNDERGROUND GAS MARKER

FIBER OPTIC POLL BOX

TRANSMISSION POLE

4" PEAR

SMALL TREES

15" VCP

TEMPORARY EROSION CONTROL LEGEND

C	CURB INLET CHECK
R	ROCK DITCH CHECK
S	SEDIMENT TRAP

SCALE

0 20 40 60

HWY 24 EROSION CONTROL
INIITIAL PHASE
SHEET 4 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	87

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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No.: 000165

REV.

MATCHLINE STA. 33+80.00

MATCHLINE STA. 39+40.00

35

POT STA. 35+27.62

S04°11'18"W

SOUTHWEST CORNER
SOUTHEAST QUARTER
SECTION 33-T50N-R32W

NORTHWEST CORNER
NORTHEAST QUARTER
SECTION 4-T49N-R32W

℄ HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

S87°44'38"E

15" VCP S

4" PL LP

2" PL LP

FIBER OPTIC PULL BOX

PULL BOX

2" MAPLE

2" PEAR

3" MAPLE

3" PEAR

3.5' DIA STEEL TRANSMISSION POLE

TRANSMISSION POLE

ASPHALT

WITH UGT

8" WOOD

8" SVEP

SANITARY CLEAN OUT

CONCRETE

HOUSE

WINDOW WELL

10" CRABAPPLE

FLOWER BED

6" CRABAPPLE

DUMPSTER

GATE CONCRETE

BILLBOARD

SMALL TREES

3" PEAR

5" PEAR

WATER VAULT

26" ASH

15"

CONC RETAINING WALL

TEMPORARY EROSION CONTROL LEGEND

(C) CURB INLET CHECK

(R) ROCK DITCH CHECK

(S) SEDIMENT TRAP

SCALE

0 20 40 60

HWY 24 EROSION CONTROL
INITIAL PHASE
SHEET 5 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	88

COUNTY
JACKSON

JOB NO.
JKU0226

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)

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MATCHLINE STA. 39+40.00

40

45

POT STA. 41+57.01

W.B.L. HWY 24

℄ HWY 24

E.B.L. HWY 24

STAIRS

MGE UNDERGROUND GAS MARKER

FIBER OPTIC PULL BOX

TRANSMISSION POLE

SWEETGUM

25" MAPLE

24" ASH

28" MAPLE

20" MAPLE

15" OAK

18" OAK

8" PEAR

6" PEAR

8" PEAR

5" ORNAMENTAL

TRANSMISSION POLE

15" ASH

6" MAPLE

TEMPORARY EROSION CONTROL LEGEND

C	CURB INLET CHECK
R	ROCK DITCH CHECK
S	SEDIMENT TRAP

SCALE

0 20 40 60

HWY 24 EROSION CONTROL
INITIAL PHASE
SHEET 6 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	89

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
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Certificate of Authority No.: 000165

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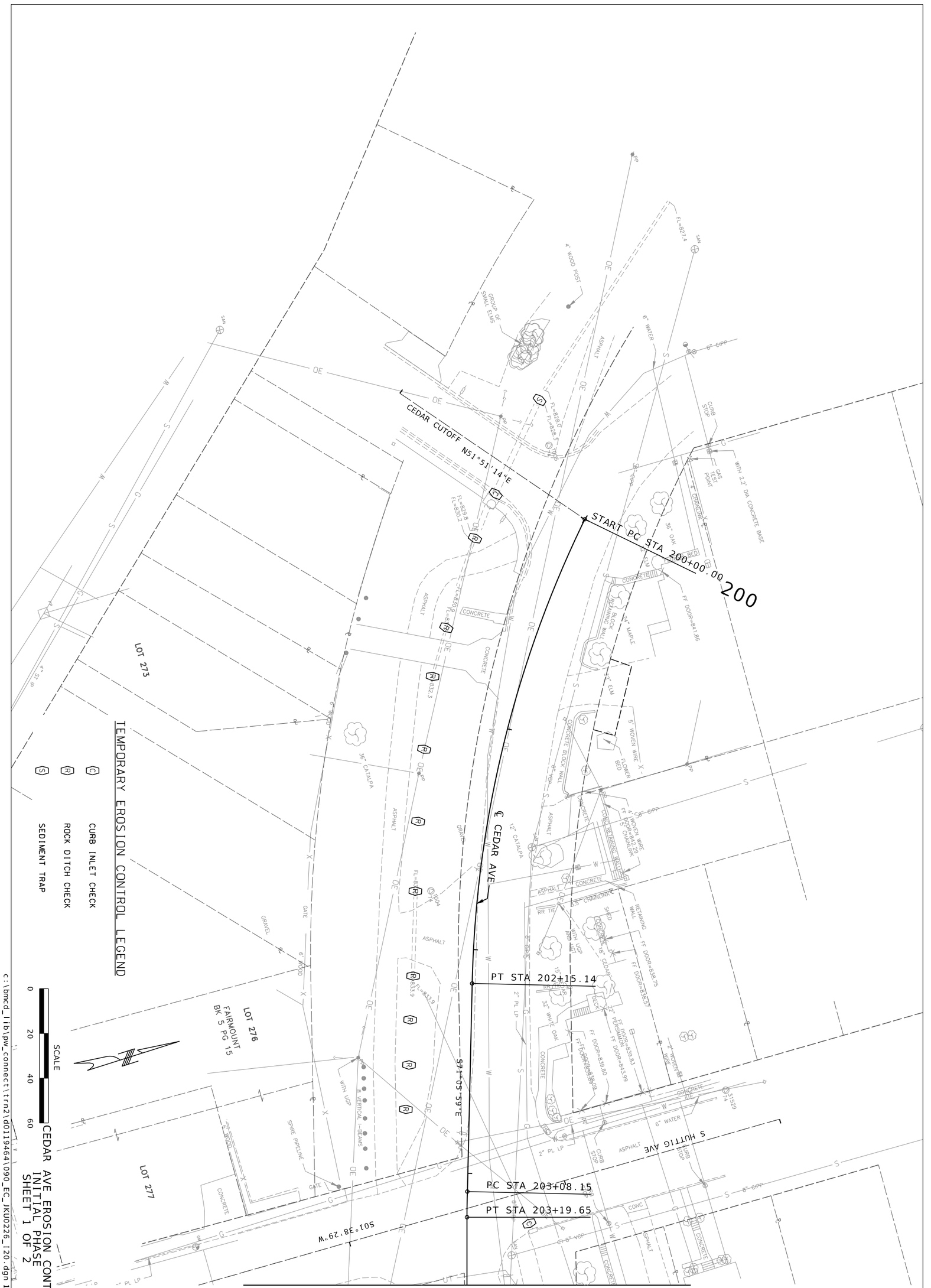

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

DATE	DESCRIPTION

BRIDGE NO.
PROJECT NO.
CONTRACT ID.
JOB NO. JKU0226
COUNTY JACKSON
DISTRICT KC
SHEET NO. 90
ROUTE 24
STATE MO
DATE PREPARED 8/4/2025

THIS SHEET HAS BEEN SIGNED AND DATED ELECTRONICALLY

STATE OF MISSOURI
JOHN MICHAEL WILLIAMS
NUMBER PE-2010008819
PROFESSIONAL ENGINEER

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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MATCHLINE STA. 203+50.00

START STA 100+00.00

PC STA 204+81.54

PT STA 205+11.98

PC STA 206+21.31

END STA 207+07.94

PT STA 206+78.69

POT STA 181+93.79

C CEDAR AVE

S72°25'02"E

S68°55'47"E

S01°28'45"W

N01°28'45"E

S02°16'42"W

LOT 214

LOT 215

LOT 279

LOT 280

LOT 281

LOT 282

FAIRMOUNT
BK 5 PG 15

TRACT B

205

150

20

15

TEMPORARY EROSION CONTROL LEGEND

(C)	CURB INLET CHECK
(R)	ROCK DITCH CHECK
(S)	SEDIMENT TRAP

SCALE
0 20 40 60

CEDAR AVE EROSION CONTROL
INITIAL PHASE
SHEET 2 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	91

COUNTY JACKSON

JOB NO. JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
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No.: 000165

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PC STA 206+21.31

S68°55'47"E

PT STA 205+11.98

205

100

PC STA 204+81.54

START STA 100+00.00

℄ ASH AVE

S02°16'42"W

END STA 102+21.42

S02°16'42"W

S72°25'02"E

3.65' 50.14'

S87°43'18"E

15

PT STA 203+19.65

PC STA 203+08.15

S01°38'29"W

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- (S) SEDIMENT TRAP

SCALE

0 20 40 60

ASH AVE EROSION CONTROL
INITIAL PHASE
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED	8/4/2025
ROUTE	24
STATE	MO
DISTRICT	KC
SHEET NO.	92
COUNTY	JACKSON
JOB NO.	JKU0226
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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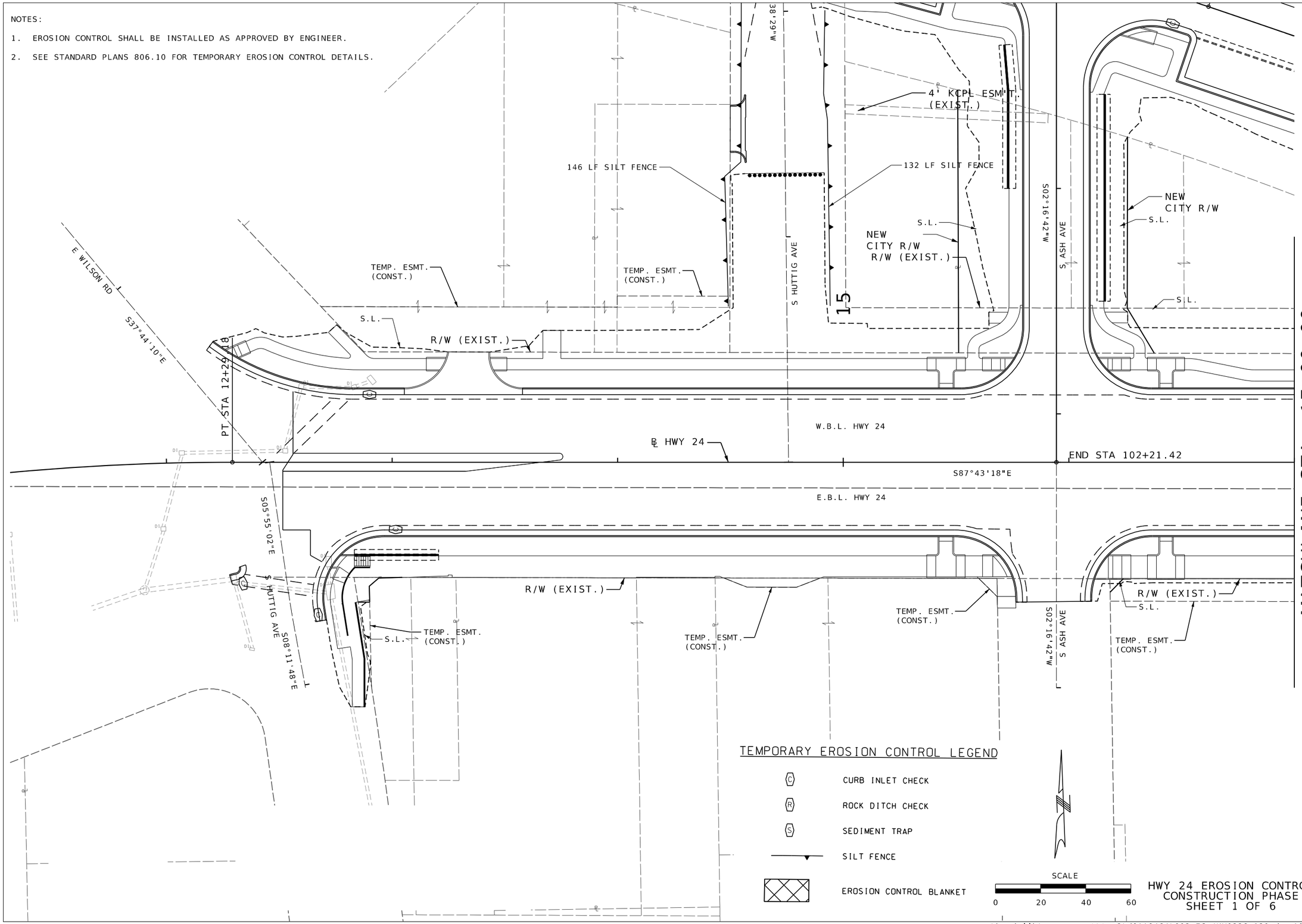
Certificate of Authority
No.: 000165

NOTES:

1. EROSION CONTROL SHALL BE INSTALLED AS APPROVED BY ENGINEER.
2. SEE STANDARD PLANS 806.10 FOR TEMPORARY EROSION CONTROL DETAILS.



MATCHLINE STA. 17+00.00

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- SEDIMENT TRAP
- SILT FENCE
- EROSION CONTROL BLANKET

SCALE
0 20 40 60

HWY 24 EROSION CONTROL
CONSTRUCTION PHASE
SHEET 1 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	93

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

PT STA 206+78.69

PC STA 206+28.45

N 28°45'W

S68°55'47"E

109 LF SILT FENCE

152 LF SILT FENCE

S ASH AVE EXIST

R/W (EXIST.)

S.L.

R/W (EXIST.)

S.L.

S02°26'44"W

R/W (EXIST.)

S.L.

POT STA 18+93.79

W.B.L. HWY 24

℄ HWY 24

S87°33'16"E

E.B.L. HWY 24

MATCHLINE STA. 17+00.00

MATCHLINE STA. 22+60.00

S01°15'06"W

S02°26'44"W

S.L.

R/W (EXIST.)

S.L.

R/W (EXIST.)

S.L.

R/W (EXIST.)

TEMP. ESMT. (CONST.)

S HARDY AVE

S LAKE DR

TEMP. ESMT. (CONST.)

10' DRIVEWAY ESM'T. (EXIST.)

10' GAS & WATER ESM'T. (EXIST.)

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- (S) SEDIMENT TRAP
- SILT FENCE
- EROSION CONTROL BLANKET

SCALE

0 20 40 60

HWY 24 EROSION CONTROL
CONSTRUCTION PHASE
SHEET 2 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	94

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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MATCHLINE STA. 22+60.00

MATCHLINE STA. 28+20.00

CITY LIMITS

R/W (EXIST.)
SUGAR CREEK/
INDEPENDENCE
CITY LIMITS

SUGAR CREEK

INDEPENDENCE

S.L.

S WILLOW AVE

S02°14'53"W

PC STA 24+29.00

25

TEMP. ESMT.
(CONST.)

R/W (EXIST.)

S.L.

PT STA 25+81.00

TEMP. ESMT.
(CONST.)

S.L.

S NORTHERN BLVD

S01°47'00"W

TEMP. ESMT.
(CONST.)

S.L.

R/W (EXIST.)

℄ HWY 24

W.B.L. HWY 24

S85°48'42"E

E.B.L. HWY 24

S02°26'44"W

TEMP. ESMT.
(CONST.)

R/W (EXIST.)

E 6TH ST

S33°51'58"E

R/W (EXIST.)

S.L.

TEMP. ESMT.
(CONST.)

TEMP. ESMT.
(CONST.)

S04°11'18"W

R/W (EXIST.)

S.L.

TEMP. ESMT.
(CONST.)

S NORTHERN BLVD

S16

TEMPORARY EROSION CONTROL LEGEND

- C — CURB INLET CHECK
- R — ROCK DITCH CHECK
- S — SEDIMENT TRAP
- SILT FENCE
- EROSION CONTROL BLANKET

SCALE
0 20 40 60

HWY 24 EROSION CONTROL
CONSTRUCTION PHASE
SHEET 3 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	95

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION

DATE

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

MATCHLINE STA. 28+20.00

MATCHLINE STA. 33+80.00

15' OIL & GAS PIPELINE ESMT. (EXIST.)

GRADING & DRAINAGE ESMT. (EXIST.)

GRADING & DRAINAGE ESMT. (EXIST.)

TEMP. ESMT. (CONST.)

R/W (EXIST.) SUGAR CREEK/ INDEPENDENCE CITY LIMITS

TEMP. ESMT. (CONST.)

TEMP. ESMT. (CONST.)

TEMP. ESMT. (CONST.)

30

S.L.

S.L.

S.L.

S.L.

S.L.

S.L.

S.L.

PC STA 28+53.48

PT STA 30+08.95

64 LF SILT FENCE

41 LF SILT FENCE

47 LF SILT FENCE

W.B.L. HWY 24

℄ HWY 24

S87°35'35"E

E.B.L. HWY 24

42 LF SILT FENCE

S.L.

S.L.

S.L.

R/W (EXIST.)

TEMP. ESMT. (CONST.)

TEMP. ESMT. (CONST.)

S.L.

10'X16' STRUCTURE ESMT. (EXIST.)

10' ELEC. OVERHANG ESM'T. (EXIST.)

38 SY EROSION CONTROL BLANKET

87 LF SILT FENCE

TEMP. ESMT. (CONST.)

94 LF SILT FENCE

34 SY EROSION CONTROL BLANKET

PERM. ESMT.

10' OIL PIPELINE ESMT. (EXIST.)

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- (S) SEDIMENT TRAP
- SILT FENCE
- EROSION CONTROL BLANKET

SCALE

0 20 40 60

HWY 24 EROSION CONTROL CONSTRUCTION PHASE SHEET 4 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	96

COUNTY JACKSON

JOB NO. JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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REV.

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MATCHLINE STA. 33+80.00

MATCHLINE STA. 39+40.00

35

S04°01'18"W

R/W (EXIST.) SUGAR CREEK/ INDEPENDENCE CITY LIMITS

SUGAR CREEK/ INDEPENDENCE CITY LIMITS

579 LF SILT FENCE

S.L.

S.L.

S.L.

POT STA 35+27.62

SOUTHWEST CORNER SOUTHEAST QUARTER SECTION 33-T50N-R32W

℄ HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

S87°44'38"E

NORTHWEST CORNER NORTHEAST QUARTER SECTION 4-T49N-R32W

S.L.

34 LF SILT FENCE

12'X8' STRUCTURE ESMT. (EXIST.)

237 LF SILT FENCE

TEMP. ESMT. (CONST.)

NEW R/W

℄ 15' SANITARY ESMT. (EXIST.)

20'X30' WATER PIPELINE ESM'T. (EXIST.)

TEMP. ESMT. (CONST.)

S.L.

509 LF SILT FENCE

NEW R/W

10' ELEC. OVERHANG ESM'T. (EXIST.)

5' U/E (EXIST.)

83 SY EROSION CONTROL BLANKET

NEW R/W

TEMP. ESMT. (CONST.)

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- (S) SEDIMENT TRAP
- SILT FENCE
- EROSION CONTROL BLANKET

SCALE

0 20 40 60

HWY 24 EROSION CONTROL
CONSTRUCTION PHASE
SHEET 5 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	97

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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REV.

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MATCHLINE STA. 39+40.00

APPROX. 16.5' PIPELINE R/W (EXIST.)

R/W (EXIST.)

SUGAR CREEK/ INDEPENDENCE CITY LIMITS

40

TEMP. ESMT. (CONST.)

R/W (EXIST.) SUGAR CREEK/ INDEPENDENCE CITY LIMITS

45

103 LF SILT FENCE

SUGAR CREEK INDEPENDENCE

S.L.

S.L.

POT STA 41+57.01

W.B.L. HWY 24

℄ HWY 24

E.B.L. HWY 24

R/W (EXIST.)

S.L.

S.L.

49 LF SILT FENCE

NEW R/W

22'X102' CONST. ESM'T. (EXIST.)

20' POWER & COMM. ESM'T. (EXIST.)

NEW R/W

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- (S) SEDIMENT TRAP
- SILT FENCE
- EROSION CONTROL BLANKET

SCALE

0 20 40 60

HWY 24 EROSION CONTROL CONSTRUCTION PHASE SHEET 6 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	98

COUNTY JACKSON

JOB NO. JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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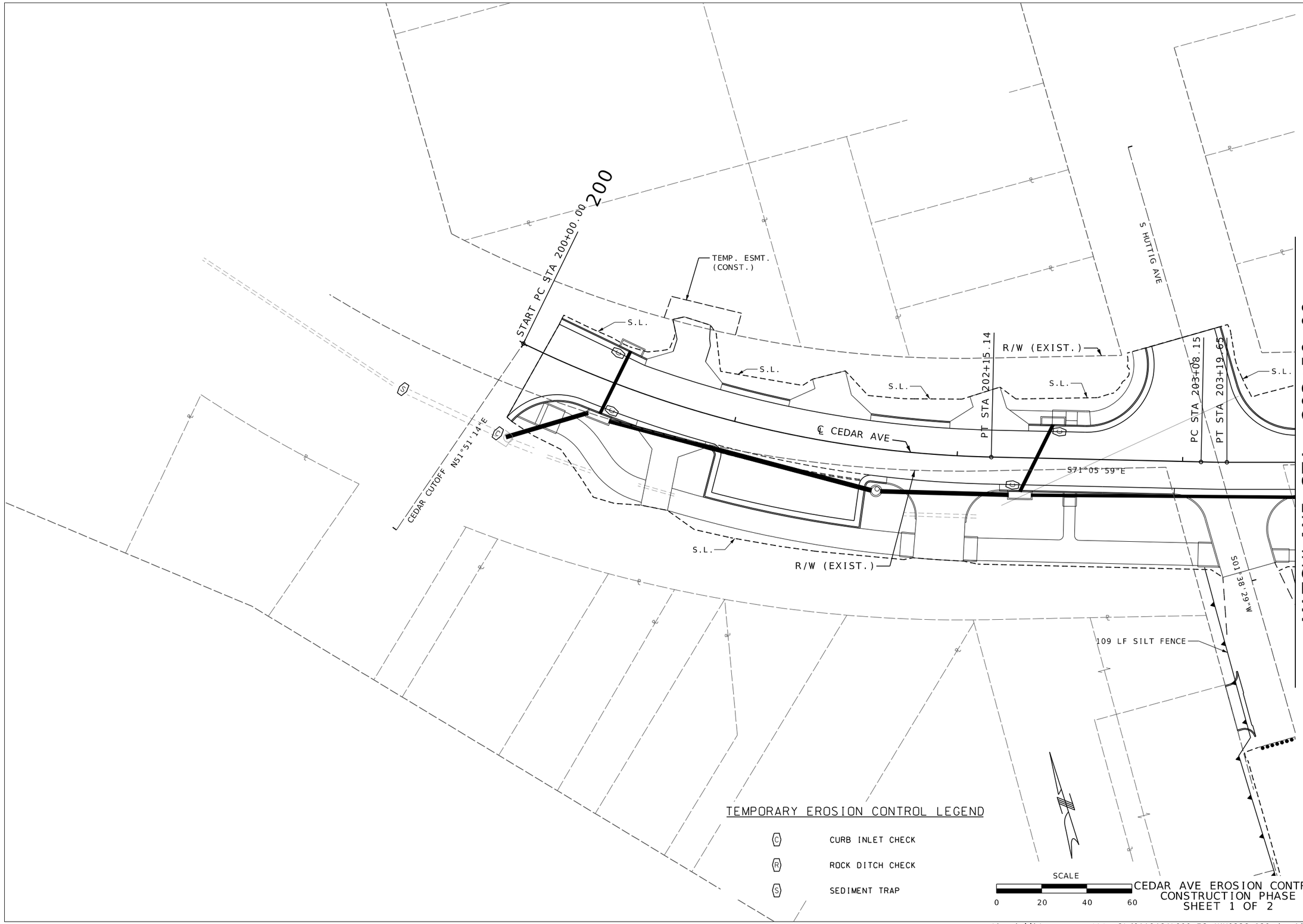
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165



STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	99

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certifcate of Authority
No.: 000165

REV.

MATCHLINE STA. 203+50.00

205

S ASH AVE

R/W (EXIST.)

S.L.

START STA 100+00.00

PC STA 204+81.54

PT STA 205+11.98

120

℄ CEDAR AVE

S72°25'02"E

S68°55'47"E

PC STA 206+21.31

S01°28'45"W

END STA 207+07.94

N01°28'45"E

PT STA 206+78.69

R/W (EXIST.)

20

152 LF SILT FENCE

64 LF SILT FENCE

PROPOSED R/W

S02°16'42"W

POT STA 208+93.79

109 LF SILT FENCE

15

102+21.42

TEMPORARY EROSION CONTROL LEGEND

C	CURB INLET CHECK
R	ROCK DITCH CHECK
S	SEDIMENT TRAP

SCALE

0 20 40 60

CEDAR AVE EROSION CONTROL
CONSTRUCTION PHASE
SHEET 2 OF 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	100

COUNTY JACKSON

JOB NO. JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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REV.

c:\bmcd_lib\pw_connect\trn2\d0119464\100_EC_JKU0226_120.dgn 10:38:59 AM 8/4/2025

PC STA 206+21.31

109 LF
SILT FENCE

S68°55'47"E

CEDAR AVE

205

100

PT STA 205+11.98

PC STA 204+81.54

START STA 100+00.00

NEW R/W

S.L.

℄ ASH AVE

S02°16'42"W

END STA 102+21.42

S02°16'42"W

15' ELECTRIC ESMT

3' KCPL ESMT
BK 444 PG 570

10' DRIVEWAY ESMT
BK 502 PG 240

S72°25'02"E

S.L.

NEW R/W

R/W (EXIST.)

132 LF SILT FENCE

15

W.B.L. HWY 24

S87°43'18"E

E.B.L. HWY 24

PT STA 203+19.65

PC STA 203+08.15

S01°38'29"W

146 LF SILT FENCE

S71°55'50"E

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- (S) SEDIMENT TRAP
- SILT FENCE
- EROSION CONTROL BLANKET

SCALE
0 20 40 60

ASH AVE EROSION CONTROL
CONSTRUCTION PHASE
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	101

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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DESCRIPTION	DATE

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

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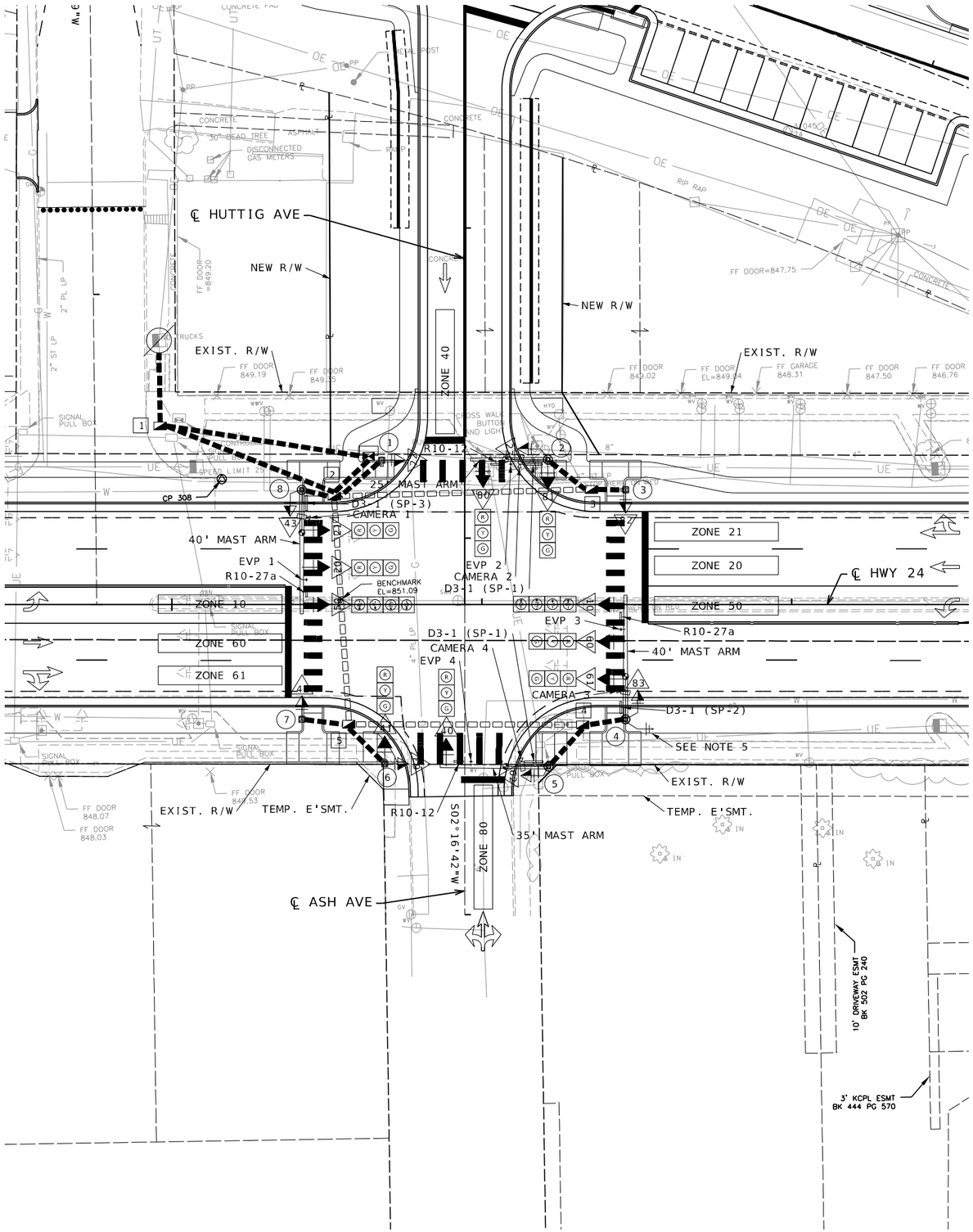


HWY 24 & ASH AVE/HUTTIG AVE

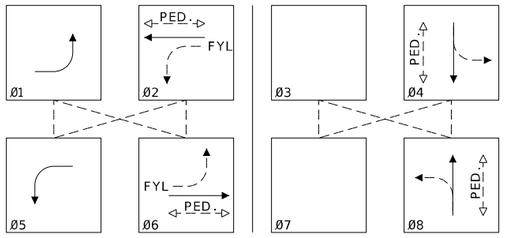
TRAFFIC SIGNALS LEGEND

- CONTROLLER
- CONTROLLER (EXISTING)
- JUNCTION BOX
- POWER SUPPLY
- WOOD POST
- SIGNAL HEAD (OPT LIM CONV)
- SIGNAL HEAD (OPT LIM)
- SIGNAL HEAD (PEDESTRIAN)
- SIGNAL HEAD (STANDARD)
- CCTV CAMERA
- VIDEO DETECTOR
- PUSH BUTTON DETECTOR
- PREFORMED PULL BOX TYPE 1
- PREFORMED PULL BOX TYPE 2
- CONCRETE PULL BOX TYPE 1
- CONCRETE PULL BOX TYPE 2
- ITS PULL BOX TYPE 2
- ITS PULL BOX TYPE 5
- WIRELESS RADIO DEVICE
- MAST ARM MOUNTED SIGN
- PRE-EMPTION DETECTOR
- MAST ARM - TYPE A BASE
- MAST ARM - TYPE C BASE
- MAST ARM - TYPE F BASE
- CONDUIT MEDIAN
- CONDUIT PUSHED
- CONDUIT BRIDGE
- CONDUIT EXISTING
- CONDUIT TRENCHED
- SPAN WIRE

NOTES:

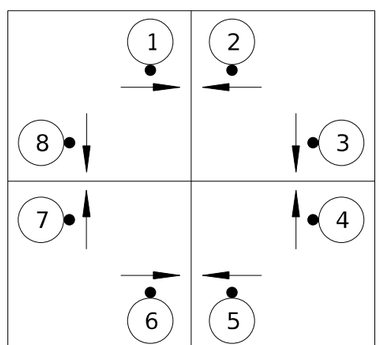
1. ALL TRAFFIC SIGNAL CONSTRUCTION AN MATERIALS SHALL CONFORM TO THE MISSOURI STANDARDS SPECIFICATION FOR HIGHWAY CONSTRUCTION, SECTION 902 "TRAFFIC SIGNALS", UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL STAKE LOCATIONS WHERE POLES, BOXES, AND THE CONTROLLER ARE TO BE INSTALLED. STAKED LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO PLACEMENT OF EQUIPMENT. SERVICE BOXES AND CONDUIT RUNS ARE APPROXIMATE AND MAY BE FIELD ADJUSTED TO CLEAR OBSTRUCTIONS AND FACILITATE WIRING, AS APPROVED BY THE ENGINEER.
3. CONDUITS UNDER ANY EXISTING PAVEMENT, INCLUDING SIDEWALKS AND DRIVEWAYS, SHALL BE BORED WITHOUT DISTURBANCE TO THE EXISTING PAVEMENT.
4. PEDESTRIAN DEVICES SHALL INCLUDE APS AND COUNTDOWN TIMERS.
5. CONTRACTOR SHALL RELOCATE EXISTING WIRELESS RADIO SYSTEM FOR COMMUNICATION WITH OPERATION GREEN LIGHT (OGL). THE CONTRACTOR SHALL CONTACT MID-AMERICA REGIONAL COUNCIL (MARC) AT 816-474-4240 AT LEAST ONE (1) WEEK PRIOR TO THE REMOVAL AND REINSTALLATION OF ANY RADIO EQUIPMENT.

TRAFFIC SIGNAL PHASING



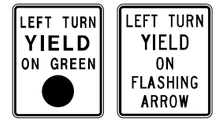
US 24 HWY — ASH AVE/HUTTIG AVE

NOTE:
---- INDICATES NON-CONFLICTING PHASES THAT MAY RUN CONCURRENTLY. PEDESTRIAN INTERVALS SHALL OCCUR ONLY AFTER PUSHBUTTON ACTIVATION.

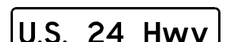


PEDESTRIAN PUSH BUTTON LAYOUT

MAST ARM MOUNTED SIGNS



R10-12 (30"x36") — R10-27a (30"x36")



D3-1 (SP-1) (72"x18")

D3-1 (SP-2) (40"x18")

D3-1 (SP-3) (60"x18")

SCALE

0 20 40 60

SIGNAL PLAN
SHEET 01 OF 02

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	102

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.
.

PROJECT NO.
.

BRIDGE NO.
.

DATE	DESCRIPTION	REV.
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IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
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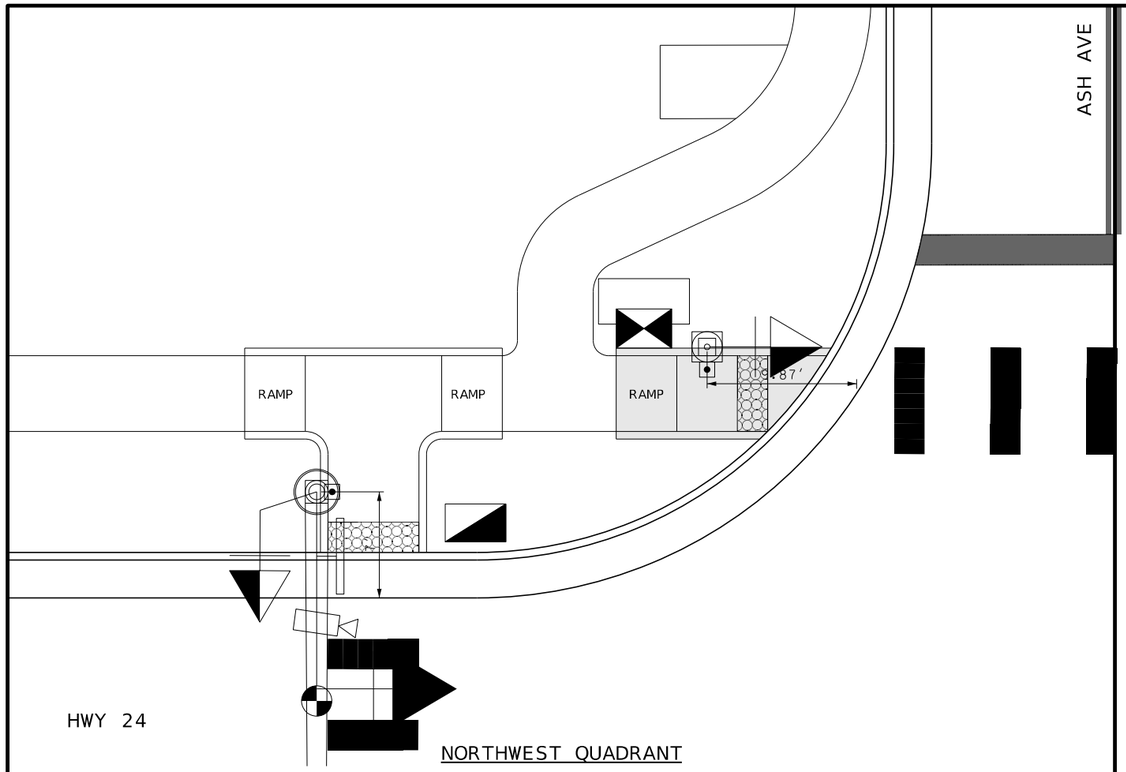
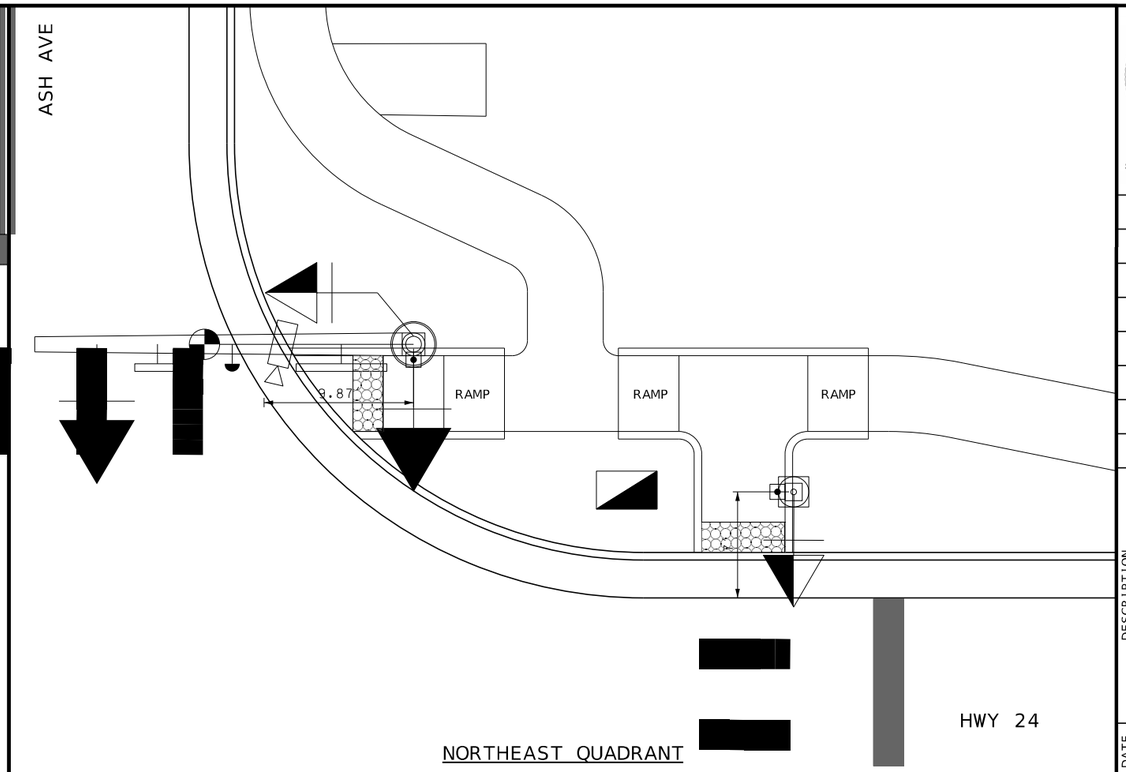
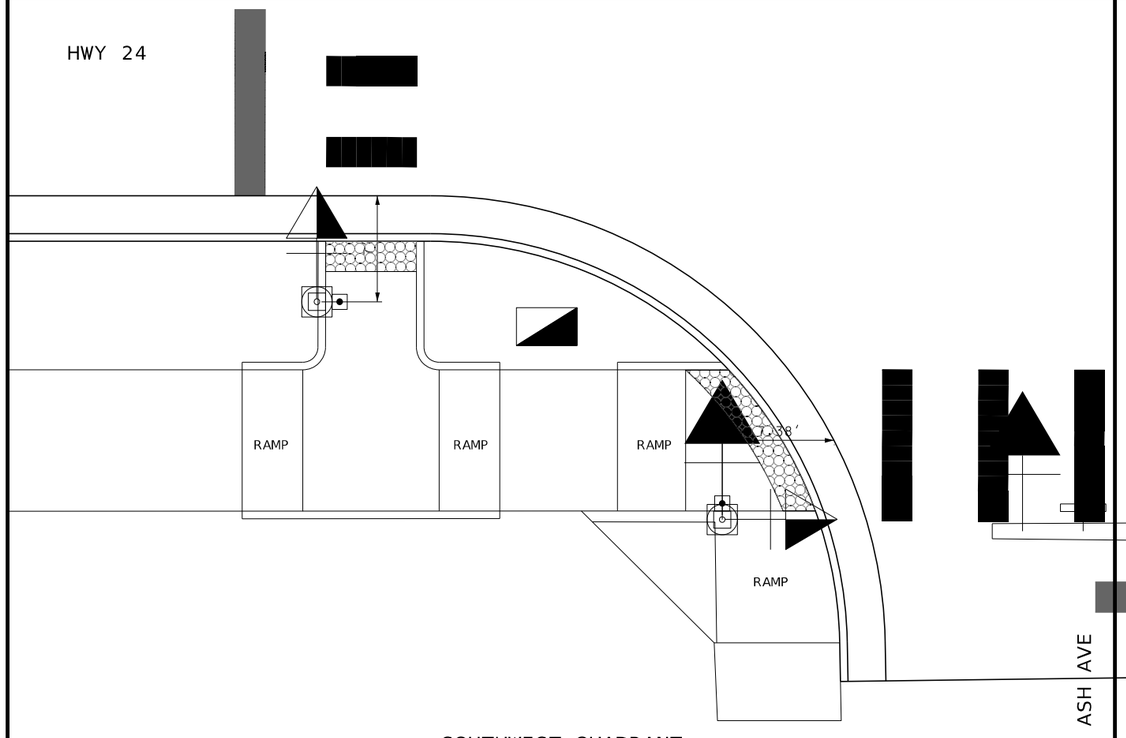


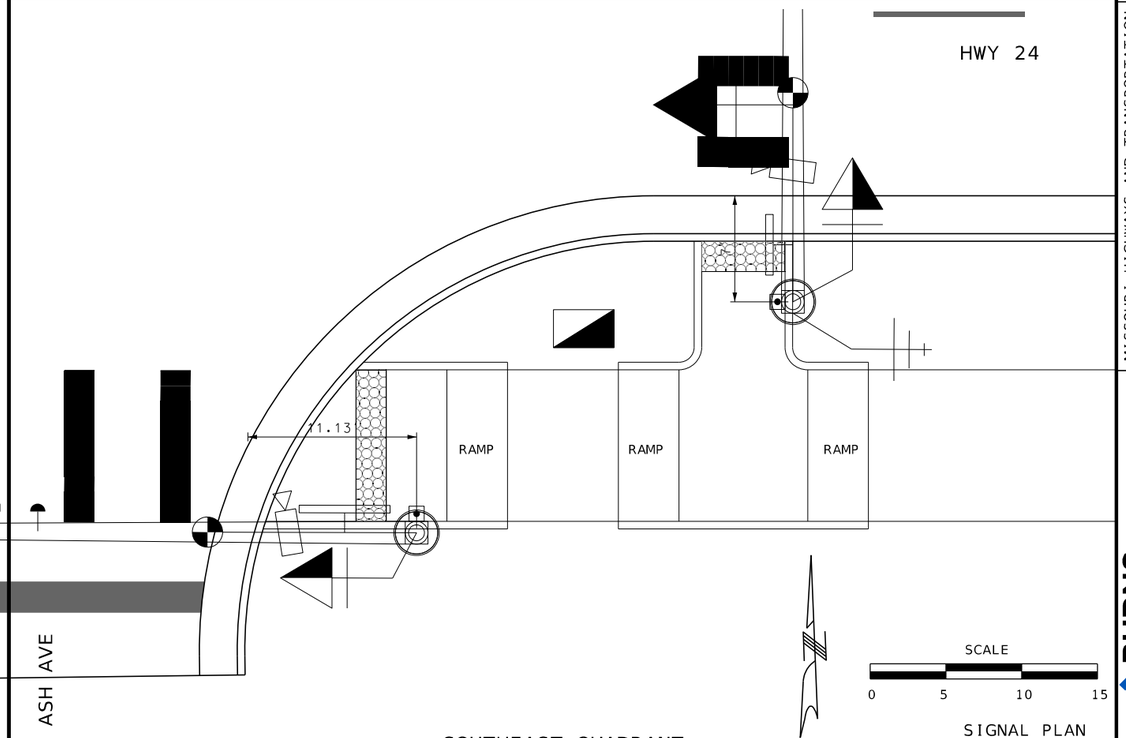
NORTHWEST QUADRANT



NORTHEAST QUADRANT



SOUTHWEST QUADRANT



SOUTHEAST QUADRANT

SCALE
0 5 10 15

SIGNAL PLAN
SHEET 02 OF 02

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	103

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.
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PROJECT NO.
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BRIDGE NO.
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DESCRIPTION	DATE
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

EFFECTIVE: 07/01/2018

POST NUMBER	PULL BOX NUMBER	LOCATION APPROACH	STATION	OFFSET	BASE A 9	A 9.5	A 10	A 10.5	A 11	A 12	F 9	F 9.5	F 10	F 10.5	F 11	F 12	C	CONCRETE** (CU. YDS.)
			CONTROLLER	(AS REQ'D)														1.93
1		SB ASH	15+68	46.6'Lt.													X	0.44
2		NB ASH	16+21	46.8'Lt.							X							2.36
3		WB 24 HWY	16+46	37.0'Lt.													X	0.44
4		EB 24 HWY	16+46	37.0'Rt.										X				2.62
5		SB ASH	16+22	52.3'Rt.								X						2.49
6		SB ASH	15+69	51.4'Rt.													X	0.44
7		EB 24 HWY	15+42	37.0'Rt.													X	0.44
8		WB 24 HWY	15+42	37.0'Lt.										X				2.62
	1	WB 24 HWY	14+96	57.5'Lt.														
	2	WB 24 HWY	15+52	34.9'Lt.														
	3	WB 24 HWY	16+35	37.1'Lt.														
	4	EB 24 HWY	16+33	38.7'Rt.														
	5	EB 24 HWY	15+57	38.6'Rt.														
				SUBTOTAL														13.78
				TOTAL														13.78

POST NUMBER	PULL BOX NUMBER	PREFORMED CONCRETE CLASS 1	CLASS 2	CLASS 3	CLASS 5	STANDARD	DOUBLE, TYPE A	DOUBLE, TYPE B	DRAIN TYPE* I	II A	II B	II C	TOP MOUNT POST 8 FT.	15 FT.	TYPE C & CL ARM LENGTH A	A	A	A	SIGNAL SPACING B	C	D	D'	SIGN SPACING B	C	D	D'	TYPE B & BL ARM LENGTH E	K	E	K	E	K	LEFT ARM E SIGNAL SPACING F	G	H	H'	SIGN SPACING F	G	H	H'	RIGHT ARM K SIGNAL SPACING L	M	N	N'	SIGN SPACING L	M	N	N'	INCLUDED ANGLE	LUMINAIRE BRACKET ARM* 4 FT.	6 FT.	8 FT.	10 FT.	12 FT.	15 FT.
1													1																																									
2															25'				0	21			5	12																																
3													1																																									
4																	40'		13	12	12		4	29																															
5																35'			33				5	24																																
6														1																																								
7													1																																									
8																	40'		13	12	12		4	29																															
	1	1																																																		
	2			1																																																	
	3		1																																																	
	4																																																			
	5			1																																																	
													SUBTOTAL		1	2	2										3	1	1	1	2																									
													TOTAL		1	2	2										3	1	1	1	2																									

SIGNAL HEADS

| SPAN NUMBER | POST NUMBER | FACE NUMBER | LUMINAIRE LED-A | INDICATIONS * 12" LENS CONVENTIONAL R | Y | YL | YRt | RL | FYL | G | S | L | Rt | 12" LENS OPTICAL LIMITING R | Y | YL | YRt | YL | YRt | G | S | L | Rt | VISORS * 12" LENS | PED. | LOUVERS * A | B | C | D | E | F | BACKPLATE* LENSES 1 | 2 | 3 | 4 | 5 | RETROREFLECTIVE BACKPLATE* LENSES 1 | 2 | 3 | 4 | 5 | BRACKET* TYPE I | II | III | ONE-FACE SECTION 1- T | S | C | B | 3- T | S | C | B | 4- T | S | C | B | 5- T | S | C | B | TWO-FACE SECTIONS 11- T | S | B | 33- T | S | C | B | 34- S | B | 35- S | B | 44- S | B | 45- S | B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

EFFECTIVE: 10-01-2015

CONDUIT (WITH #14 TRACER WIRE)

FROM	TO	CENTER TO CENTER DISTANCE	LOOP DET.	TRENCH				PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"		2"	3"	4"	2"	3"	4"	2"	3"		
∅	P.S.	10'		18'													SUBSIDIARY TO P.S.
P.S.	1	28'		31'													
P.S.	1	28'		31'													
1	⊠	68'		71'													
1	2	61'		59'													
⊠	2	17'				20'											
⊠	2	17'				18'											
⊠	2	17'		18'													
2	8	11'			12'												
2	1	19'		20'													
2	3	83'								81'							
3	2	17'			18'												
3	3	11'		12'													
2	5	74'								72'							
5	6	18'			19'												
5	7	15'		16'													
5	4	75'								73'							
4	4	14'			15'												
4	5	18'		19'													
SUBTOTALS				277'	64'	38'				226'							
TOTALS				277'	64'	38'				226'							

CABLE

FROM	TO	CENTER TO CENTER DISTANCE	POWER		CONTROL				CLOSED LOOP INTERCONNECT	LUMINAIRE		MISC. CABLES				REMARKS
			1c #2	1c #8	2c #16	5c #16	7c #16	3c #16	3 PAIR #16	CONTROL 2c #12	POLE & BRACKET 1c #10	VIDEO	EVP	RADIO	CCTV	
∅	P.S.	10'	147'													SUBSIDIARY TO P.S.
P.S.	⊠	96'		459'												
⊠	22	80'				104'										
⊠	PB22	80'			103'											
⊠	50	72'					144'									
⊠	20	72'					132'									INCLUDES JUMPER TO 21
⊠	EVP1	72'											149'			
⊠	⊏◁1	72'										136'				
⊠	43	72'				96'										
⊠	PB22	72'			95'											
⊠	80	161'					222'									
⊠	81	161'					194'									
⊠	EVP2	161'											227'			
⊠	⊏◁2	161'										231'				
⊠	23	161'				191'										
⊠	PB23	161'			178'											
⊠	82	155'				185'										
⊠	PB82	155'			184'											
⊠	42	150'				180'										
⊠	PB42	150'			179'											
⊠	63	153'				183'										
⊠	PB63	153'			182'											
⊠	41	153'					186'									
⊠	40	228'					309'									
⊠	EVP4	228'											314'			
⊠	⊏◁4	228'										304'				
⊠	62	228'				264'										
⊠	PB62	228'			263'											
⊠	10	224'					308'									
⊠	60	224'					296'									INCLUDES JUMPER TO 61
⊠	EVP3	224'											313'			
⊠	⊏◁3	224'										300'				
⊠	83	224'				260'										
⊠	PB83	224'			259'											
⊠	⫩	224'												300'		
P.S.	2	89'								103'						
2	⊶1	11'								17'	45'					
2	⊶2	100'								106'	45'					
2	⊶3	163'								181'	45'					
2	⊶4	166'								184'	45'					
SUBTOTALS			147'	459'	1443'	1463'	1791'			591'	180'	971'	1003'	300'		
TOTALS			155'	480'	1520'	1540'	1880'			620'	190'	1020'	1050'	315'		

NOTES:
1) POWER CABLE, GROUND WIRE & CONDUIT FROM POWER SOURCE TO POWER SUPPLY SHALL BE INCLUDED FOR AS A PART OF THE POWER SUPPLY BID ITEM.
2) CABLE QUANTITY FOR WIRELESS RADIO DEVICE PROVIDED FOR INFORMATION ONLY. CABLE TO BE PAID FOR AS A PART OF THE WIRELESS RADIO SYSTEM RELOCATION BID ITEM.
3) CABLE QUANTITY FOR VIDEO DETECTION SYSTEM PROVIDED FOR INFORMATION ONLY. CABLE TO BE PAID FOR AS A PART OF THE KC DISTRICT VIDEO DETECTION SYSTEM BID ITEM.
4) CABLE QUANTITY FOR PRE-EMPTION SYSTEM PROVIDED FOR INFORMATION ONLY. CABLE TO BE PAID FOR AS A PART OF THE EMERGENCY VEHICLE PRE-EMPTION BID ITEM.
5) CABLE PAY TOTALS INCLUDE 5% ADDER FOR SNAKING.

INTERSECTION HWY 24 & ASH AVE

D-37B

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE 24 | STATE MO
DISTRICT KC | SHEET NO. 105
COUNTY JACKSON
JOB NO. JKU0226
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)

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EFFECTIVE 04-01-2018

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
					CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
							SIGNALS	LIGHTING				
WB U.S. 24 HWY	14+97	86'Lt.	Type 1		15 Amps	15 Amps	100 Amps	Amps		Amps	Ct. Ft.	
			Type		15 Amps	Amps	Amps	Amps		Amps	Ct. Ft.	

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH TYPE		COORDINATION INTERFACE *						TIME * CLOCK	NEMA CABINET TYPE *			170 CABINET TYPE *		170 SOFTWARE *	
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I	II	12C/7C HARDWIRE (1) MASTER	12C/7C HARDWIRE (1) LOCAL	TIME BASE	CLOSED LOOP NEMA	CLOSED LOOP 170	FIBER		E	EV	DOUBLE	332	336S	BITRAN	WAPITI
WB U.S. 24 HIGHWAY	15+63	47.8'Lt.			1												1					

NEMA DETECTOR ASSIGNMENT

		CARD POSITION							
		1	2	3	4	5	6	7	8
CHANNEL	1		VIDEO						
	2								

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8
EBL Ø1	WB Ø2	FUTURE	SB Ø4	WBL Ø5	EB Ø6	FUTURE	NB Ø8
9	10	11	12	13	14	15	16
PED Ø2 FYL OLM	PED Ø4	PED Ø6 FYL OL0	PED Ø8	FUTURE	FUTURE	FUTURE	FUTURE

SIGNAL SIGNS

QUANTITY	MUTCD SIGN NUMBER	SIZE INCHES	AREA SQ.FT.	SIGN TOTAL AREA ITEM NO. 90208.33 SQ.FT.	SIGNAL SIGN MOUNTING HARDWARE ITEM NO. 90208.34 EA.
	R10-10L	24 X 30	5.0		
	R10-10R	24 X 30	5.0		
	R3-5L	30 X 36	7.5		
	R3-5R	30 X 36	7.5		
	R3-5A	30 X 36	7.5		
	R3-6L	30 X 36	7.5		
	R3-6R	30 X 36	7.5		
	R3-2	24 X 24	4.0		
	R3-1	24 X 24	4.0		
	R3-3	24 X 24	4.0		
2	D3-1 (SP-1)	72 X 18	9.0	18.0	2
1	D3-1 (SP-2)	48 X 18	6.0	6.0	1
1	D3-1 (SP-3)	60 X 18	7.5	7.5	1
8	R10-3E	9 X 15	0.9		
	R10-11A	24 X 30	5.0		
2	R10-12	30 X 36	7.5	15.0	2
2	R10-27A	30 X 36	7.5	15.0	2
			SUBTOTAL	61.5	8
			TOTAL	61.5	8

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE				
		PUSH BUTTON	INDUCTION LOOP (2)			VIDEO
			STANDARD	DELAY/ EXTEND *	CALL UNIT *	
50	WB US 24 HWY					X
20	WB US 24 HWY					X
21	WB US 24 HWY					X
80	NB ASH					X
81	NB ASH					X
10	EB US 24 HWY					X
60	EB US 24 HWY					X
61	EB US 24 HWY					X
40	SB ASH					X
41	SB ASH					X
22	NB ASH	1				
23	NB ASH	1				
82	EB US 24 HWY	1				
83	EB US 24 HWY	1				
62	SB ASH	1				
63	SB ASH	1				
42	WB US 24 HWY	1				
43	WB US 24 HWY	1				
TOTAL		8				

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

(1) MoDOT "D" PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS WITH 7C HARDWIRE INTERCONNECT.

(2) PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.

(3) FLASHING YELLOW ARROW (FYA) SHALL BE PROGRAMMED IN MODE G.

(4) MMU2 WITH ETHERNET PORT IS REQUIRED FOR FLASHING YELLOW ARROW (FYA).

(5) COUNTDOWN PEDESTRIAN HEADS SHALL BE PAID FOR AS COUNTDOWN PEDESTRIAN SIGNAL HEAD, TYPE 1S.

(6) VIDEO DETECTION TO BE PAID FOR AS KC DISTRICT VIDEO DETECTION SYSTEM.

MISC. BID ITEM SUMMARY

BID ITEM	QUANTITY	UNITS
WIRELESS RADIO SYSTEM RELOCATION	1	EACH
CCTV CAMERA ASSEMBLY RELOCATION		EACH
EMERGENCY VEHICLE PRE-EMPTION SYSTEM	1	EACH
VIDEO DETECTION CAMERA RELOCATION		EACH
KC DISTRICT VIDEO DETECTION SYSTEM	1	EACH
COUNTDOWN PEDESTRIAN SIGNAL HEAD, TYPE 1S	8	EACH
ACCESSIBLE PEDESTRIAN SIGNAL	8	EACH

R10-12

R10-27a

R10-3eR

R10-3eL

R10-3 SIGNS ARE SHOWN FOR INFORMATION ONLY AND SHALL BE INCIDENTIAL TO THE ACCESSIBLE PEDESTRIAN SIGNAL BID ITEM.

1.875" Radius, 0.750" Border, White on Green:
"U.S. 24 Hwy", D Font:
D3-1 (SP-1)

1.875" Radius, 0.750" Border, White on Green:
"Ash Ave", D Font:
D3-1 (SP-2)

1.875" Radius, 0.750" Border, White on Green:
"Huttig Ave", D Font:
D3-1 (SP-3)

HWY 24 & ASH AVE
INTERSECTION

D-37C

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	106

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

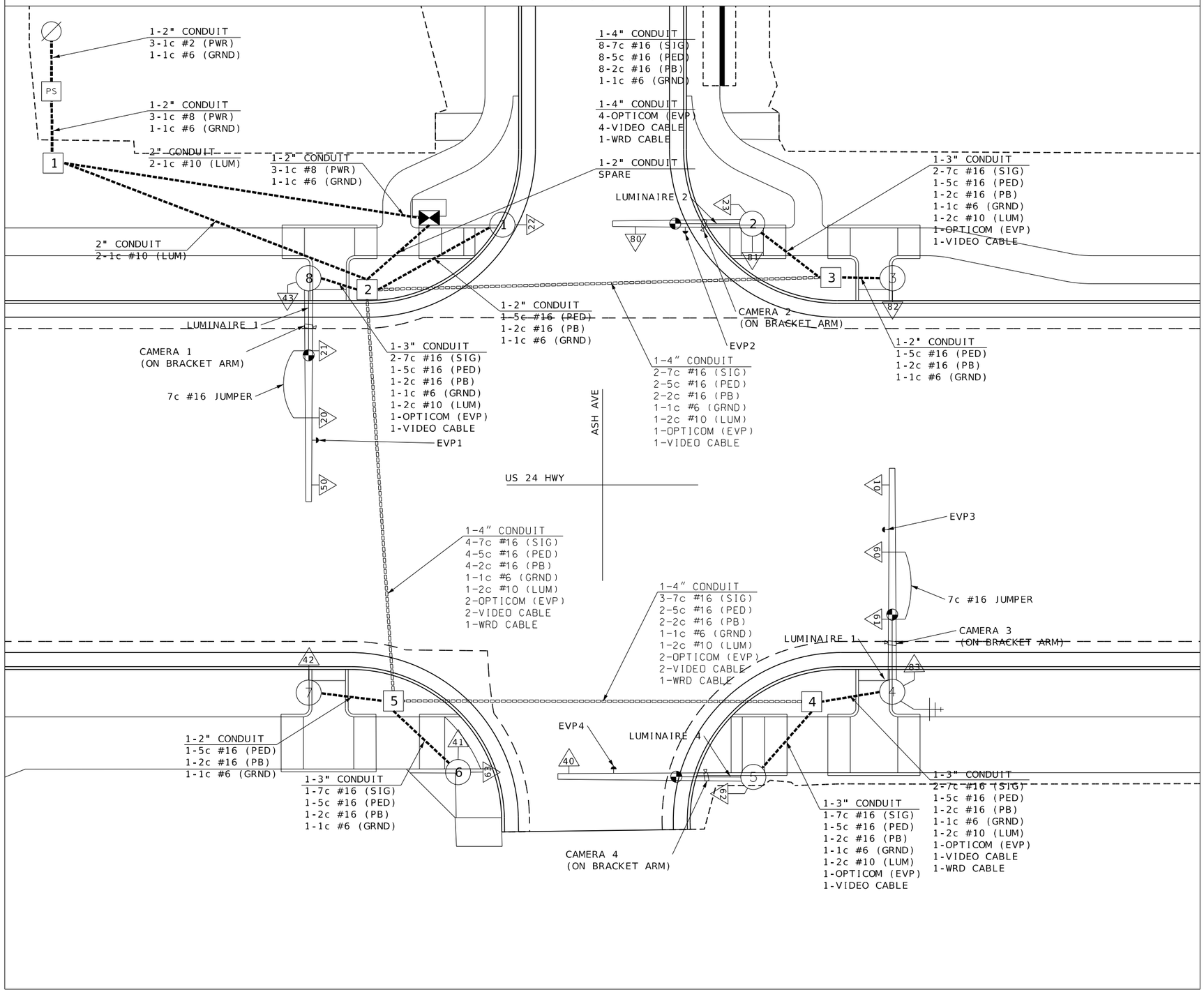
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

EFFECTIVE 12-01-17

WIRING DIAGRAM



LEGEND

	SIGNAL HEAD WITH NUMBER
	PULL BOX WITH NUMBER
	SIGNAL POLE WITH NUMBER
	SIGNAL CONTROLLER
	POWER SOURCE
	WIRELESS RADIO DEVICE
	EMERGENCY VEHICLE PREEMPTION DETECTOR
	VIDEO CAMERA
	CCTV
	LUMINAIRE
PS	POWER SUPPLY
	TRENCHED CONDUIT
	PUSHED CONDUIT
SIG	VEHICLE SIGNAL CABLE
PED	PEDESTRIAN SIGNAL CABLE
PB	PEDESTRIAN PUSH BUTTON CABLE
LUM	LUMINAIRE CABLE
PWR	POWER CABLE
EVP	EMERGENCY VEHICLE PREEMPTION CABLE
GRND	GROUND CABLE
CCTV	CAT 5e, OUTDOOR RATED, SHIELDED CABLE
WRD	WIRELESS RADIO DEVICE

HWY 24 & ASH AVE

INTERSECTION

D-37D

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000876
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	107

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

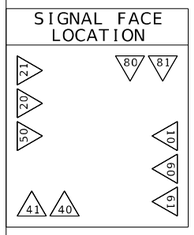
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

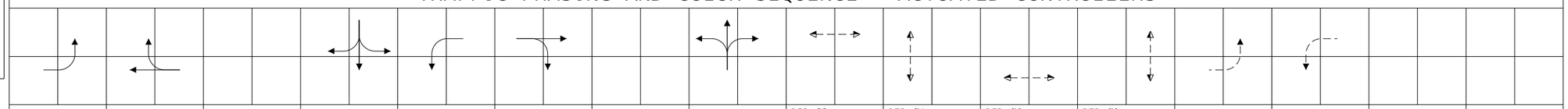
BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

EFFECTIVE 12/01/2017

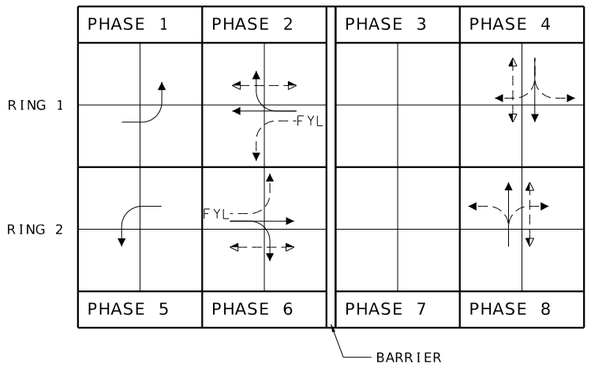
SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS



		PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	PED Ø2	PED Ø4	PED Ø6	PED Ø8			
										OVERLAP	OVERLAP	OVERLAP	OVERLAP	OVERLAP M	OVERLAP O	
FACE NUMBERS		10	20 21		40 41	50	60 61		80 81	22 23	42 43	62 63	82 83	10	50	FACE NUMBERS
SIGNAL INDICATIONS	R	RL	R R		R R	RL	R R		R R	DW DW	DW DW	DW DW	DW DW			R
	Y	YL	Y Y		Y Y	YL	Y Y		Y Y	FDW FDW	FDW FDW	FDW FDW	FDW FDW			Y
	FYL													FYL	FYL	FYL
	G	L	G G		G G	L	G G		G G	W W	W W	W W	W W			G
DETECTOR ASSIGNMENTS		10	20 21		40 41	50	60 61		80 81							DETECTOR ASSIGNMENTS
DETECTOR ASSIGNMENTS (PEDS. ONLY)										22 23	42 43	62 63	82 83			
OVERLAP PARENT PHASES														2	6	



RING STRUCTURE

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

FLASHING OPERATION	
US 24 HWY	FR
ASH AVE	FR

CONTROLLER TYPE	NEMA

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF HWY 24

WITH ASH AVE

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED

FDW — FLASHING DON'T WALK
W — WALK
DW — DON'T WALK
R/W — RIGHT OF WAY INTERVAL
YRt — YELLOW RIGHT ARROW
RT. — GREEN RIGHT ARROW
LY -YL — YELLOW LEFT ARROW
L — GREEN LEFT ARROW
S — GREEN STRAIGHT AHEAD ARROW
G — CIRCULAR GREEN
Y — CIRCULAR YELLOW
R — CIRCULAR RED
RL — RED LEFT ARROW
Ø — TRAFFIC PHASE
AO — ALL OTHERS
FR — FLASHING RED
FY — FLASHING CIRCULAR YELLOW
FYL — FLASHING YELLOW LEFT ARROW

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	108

COUNTY: JACKSON

JOB NO.: JKU0226

CONTRACT ID.:

PROJECT NO.:

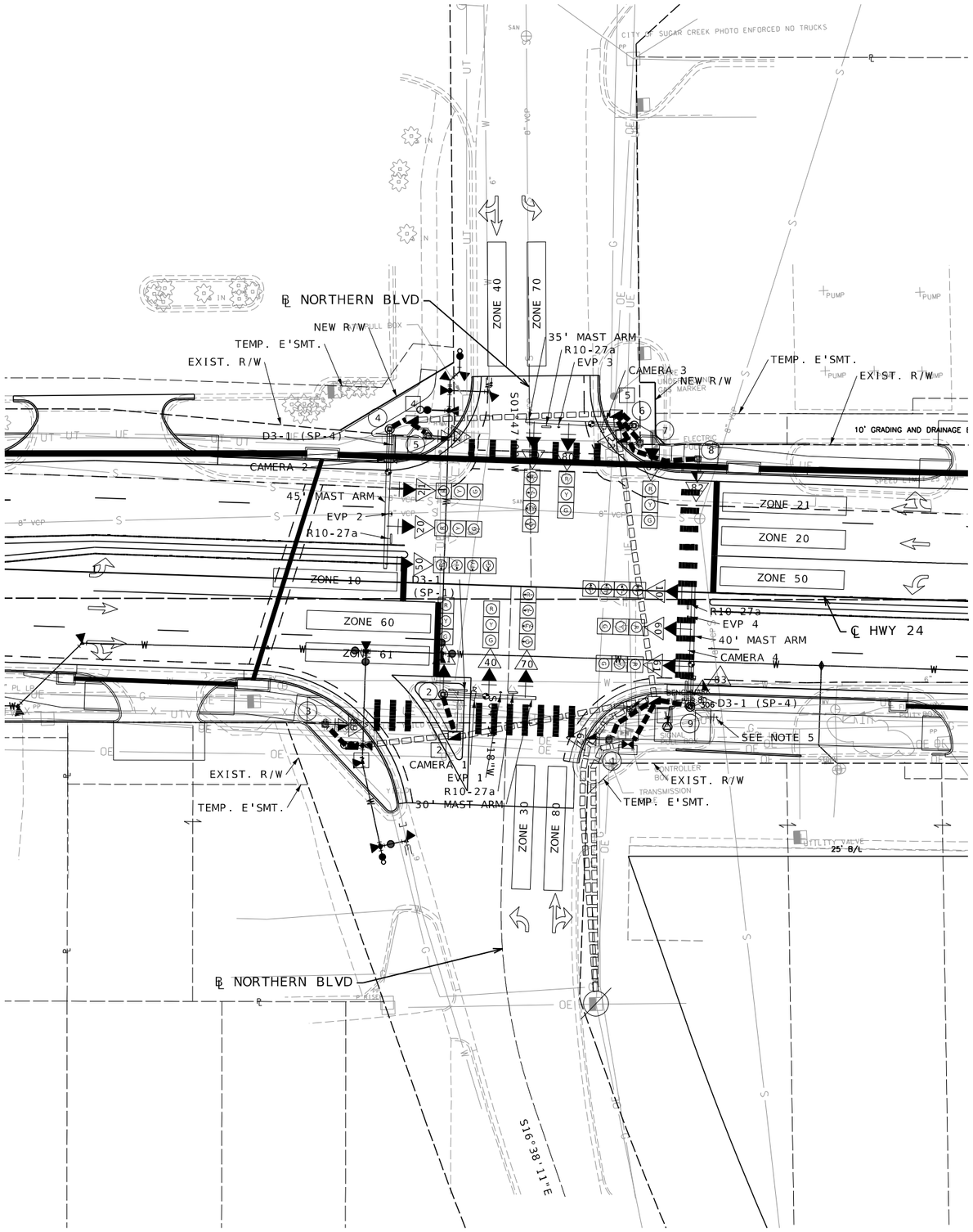
BRIDGE NO.:

DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



HWY 24 & NORTHERN BLVD

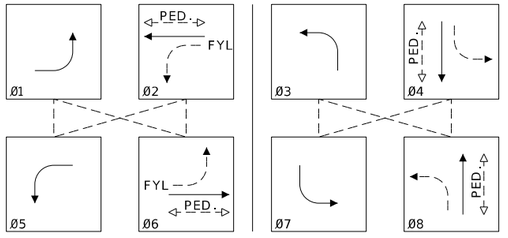
TRAFFIC SIGNALS LEGEND

- CONTROLLER
- CONTROLLER (EXISTING)
- JUNCTION BOX
- POWER SUPPLY
- WOOD POST
- SIGNAL HEAD (OPT LIM CONV)
- SIGNAL HEAD (OPT LIM)
- SIGNAL HEAD (PEDESTRIAN)
- SIGNAL HEAD (STANDARD)
- CCTV CAMERA
- VIDEO DETECTOR
- PUSH BUTTON DETECTOR
- PREFORMED PULL BOX TYPE 1
- PREFORMED PULL BOX TYPE 2
- CONCRETE PULL BOX TYPE 1
- CONCRETE PULL BOX TYPE 2
- ITS PULL BOX TYPE 2
- ITS PULL BOX TYPE 5
- WIRELESS RADIO DEVICE
- MAST ARM MOUNTED SIGN
- PRE-EMPTION DETECTOR
- MAST ARM - TYPE A BASE
- MAST ARM - TYPE C BASE
- MAST ARM - TYPE F BASE
- CONDUIT MEDIAN
- CONDUIT PUSHED
- CONDUIT BRIDGE
- CONDUIT EXISTING
- CONDUIT TRENCHED
- SPAN WIRE

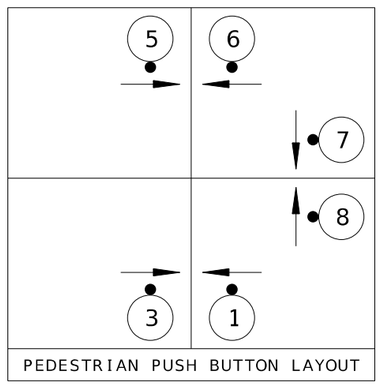
NOTES:

1. ALL TRAFFIC SIGNAL CONSTRUCTION AN MATERIALS SHALL CONFORM TO THE MISSOURI STANDARDS SPECIFICATION FOR HIGHWAY CONSTRUCTION, SECTION 902 "TRAFFIC SIGNALS", UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL STAKE LOCATIONS WHERE POLES, BOXES, AND THE CONTROLLER ARE TO BE INSTALLED. STAKED LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO PLACEMENT OF EQUIPMENT. SERVICE BOXES AND CONDUIT RUNS ARE APPROXIMATE AND MAY BE FIELD ADJUSTED TO CLEAR OBSTRUCTIONS AND FACILITATE WIRING, AS APPROVED BY THE ENGINEER.
3. CONDUITS UNDER ANY EXISTING PAVEMENT, INCLUDING SIDEWALKS AND DRIVEWAYS, SHALL BE BORED WITHOUT DISTURBANCE TO THE EXISTING PAVEMENT.
4. PEDESTRIAN DEVICES SHALL INCLUDE APS AND COUNTDOWN TIMERS.
5. CONTRACTOR SHALL RELOCATE EXISTING WIRELESS RADIO SYSTEM FOR COMMUNICATION WITH OPERATION GREEN LIGHT (OGL). THE CONTRACTOR SHALL CONTACT MID-AMERICA REGIONAL COUNCIL (MARC) AT 816-474-4240 AT LEAST ONE (1) WEEK PRIOR TO THE REMOVAL AND REINSTALLATION OF ANY RADIO EQUIPMENT.

TRAFFIC SIGNAL PHASING



NOTE:
---- INDICATES NON-CONFLICTING PHASES THAT MAY RUN CONCURRENTLY.
PEDESTRIAN INTERVALS SHALL OCCUR ONLY AFTER PUSHBUTTON ACTIVATION.



PEDESTRIAN PUSH BUTTON LAYOUT

MAST ARM MOUNTED SIGNS

LEFT TURN YIELD ON FLASHING ARROW
R10-27a
(30"x36")

U.S. 24 Hwy
D3-1 (SP-1)
(72"x18")

Northern Ave
D3-1 (SP-4)
(78"x18")

SCALE
0 20 40 60

SIGNAL PLAN
SHEET 01 OF 02

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025
ROUTE 24 | STATE MO
DISTRICT KC | SHEET NO. 109
COUNTY JACKSON
JOB NO. JKU0226
CONTRACT ID. .
PROJECT NO. .
BRIDGE NO. .

REV.	DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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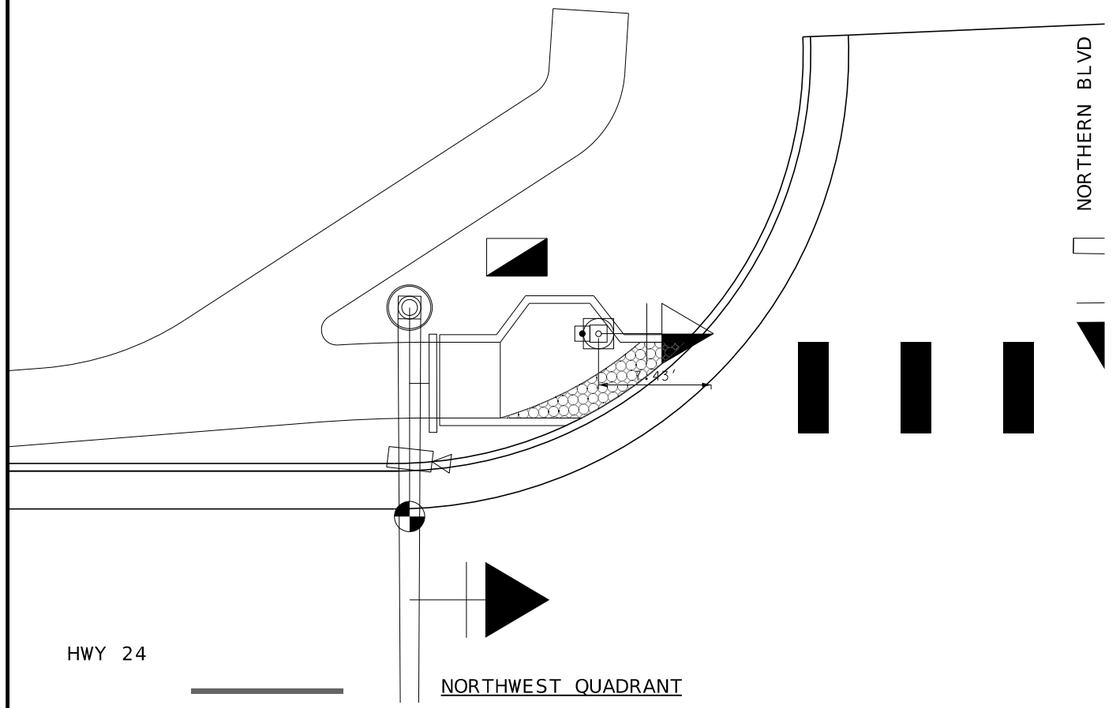
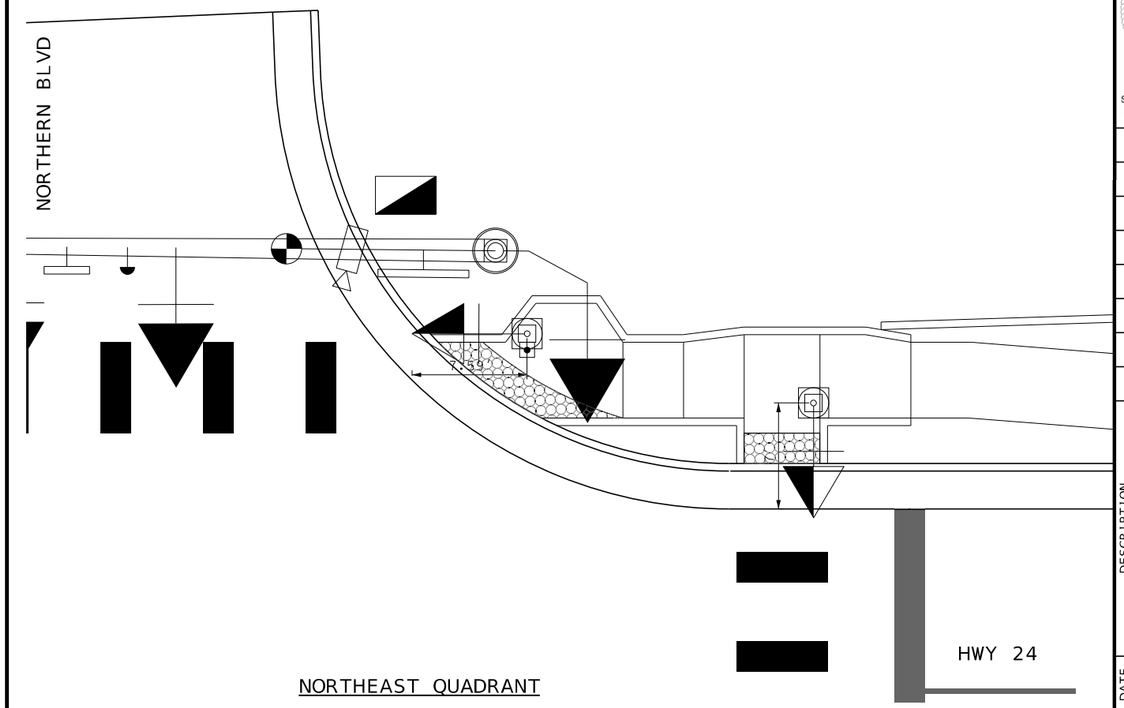
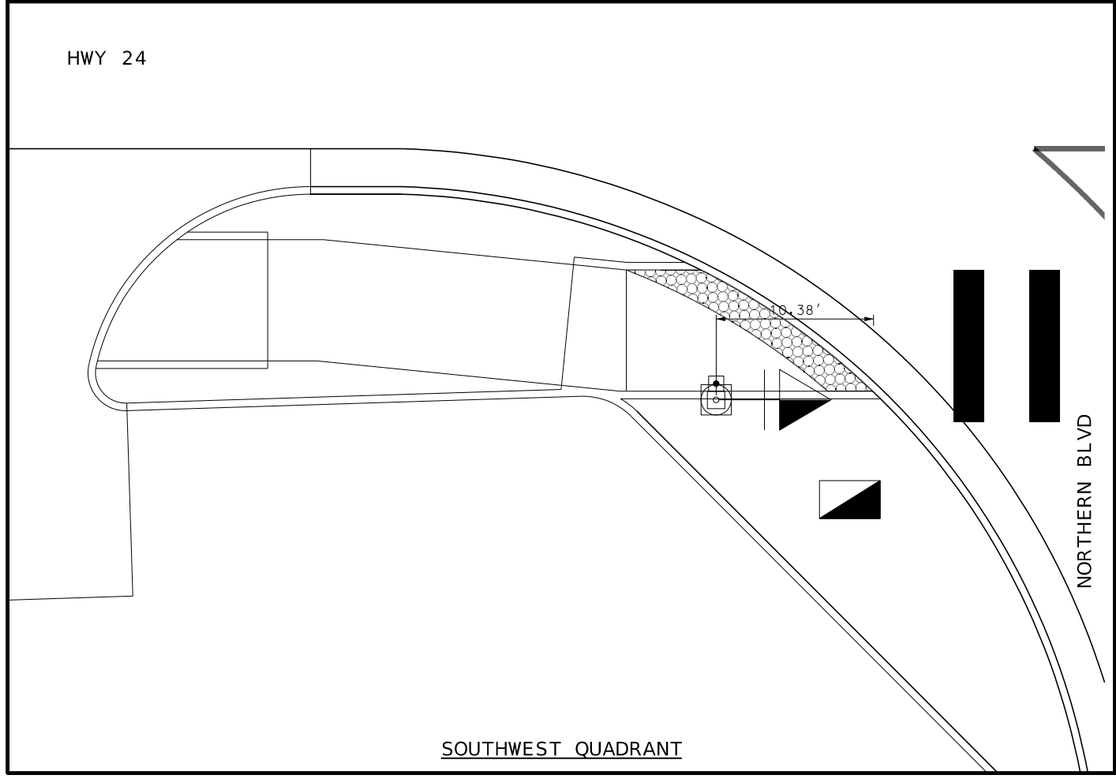


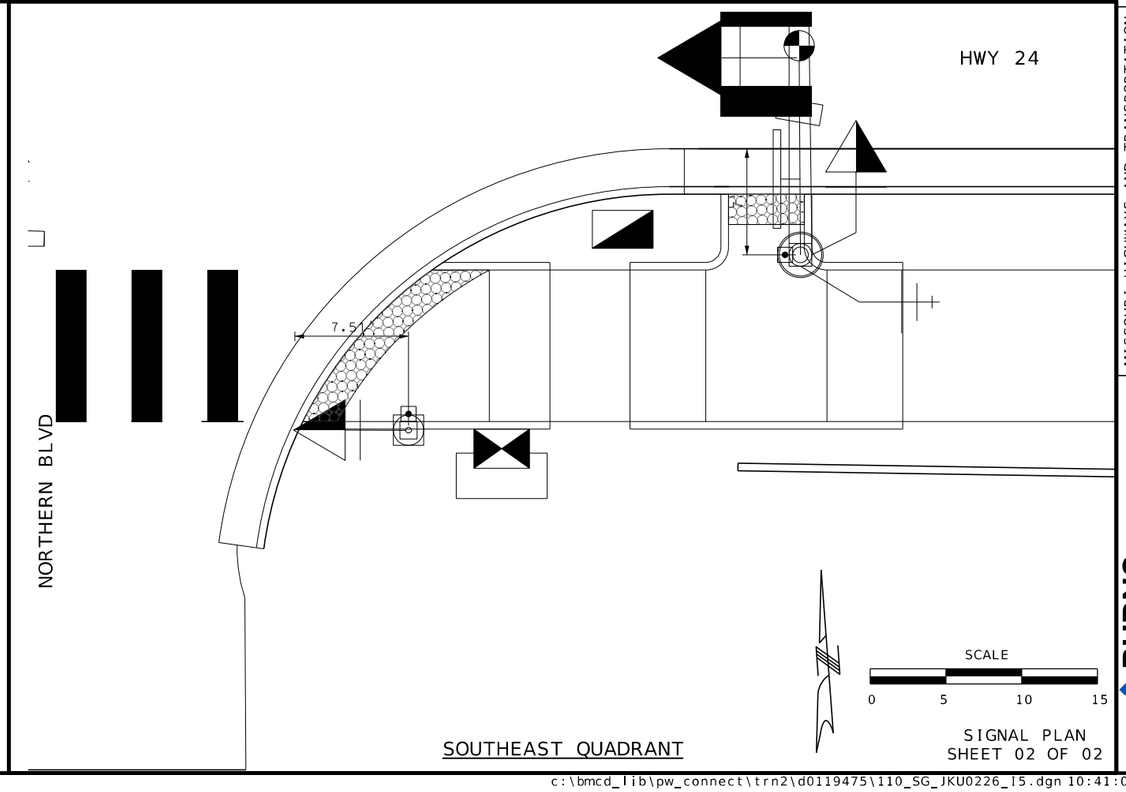
NORTHWEST QUADRANT



NORTHEAST QUADRANT



SOUTHWEST QUADRANT



SOUTHEAST QUADRANT

SIGNAL PLAN
SHEET 02 OF 02

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	110

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.
.

PROJECT NO.
.

BRIDGE NO.
.

DESCRIPTION	DATE
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IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

EFFECTIVE: 07/01/2018

| POST NUMBER | PULL BOX NUMBER | LOCATION APPROACH | LOCATION STATION | LOCATION OFFSET | BASE A 9 | BASE A 9.5 | BASE A 10 | BASE A 10.5 | BASE A 11 | BASE A 12 | BASE F 9 | BASE F 9.5 | BASE F 10 | BASE F 10.5 | BASE F 11 | BASE F 12 | BASE C | CONCRETE** (CU. YDS.) | PULL BOX PREFORMED CONCRETE CLASS 1 | CLASS 2 | CLASS 3 | CLASS 5 | STANDARD | DOUBLE, TYPE A | DOUBLE, TYPE B | DRAIN TYPE* I | DRAIN TYPE* II A | DRAIN TYPE* II B | DRAIN TYPE* II C | TOP MOUNT POST 8 FT. | TOP MOUNT POST 15 FT. | TYPE C & CL ARM LENGTH A | TYPE C & CL SIGNAL SPACING A | TYPE C & CL SIGNAL SPACING A | TYPE C & CL SIGNAL SPACING A | TYPE C & CL SIGNAL SPACING B | TYPE C & CL SIGNAL SPACING C | TYPE C & CL SIGNAL SPACING D | TYPE C & CL SIGNAL SPACING D' | TYPE C & CL SIGN SPACING B | TYPE C & CL SIGN SPACING C | TYPE C & CL SIGN SPACING D | TYPE C & CL SIGN SPACING D' | TYPE B & BL ARM LENGTH E | TYPE B & BL ARM LENGTH K | TYPE B & BL ARM LENGTH E | TYPE B & BL ARM LENGTH K | TYPE B & BL ARM LENGTH E | TYPE B & BL LEFT ARM E SIGNAL SPACING F | TYPE B & BL LEFT ARM E SIGNAL SPACING G | TYPE B & BL LEFT ARM E SIGNAL SPACING H | TYPE B & BL LEFT ARM E SIGNAL SPACING H' | TYPE B & BL LEFT ARM E SIGN SPACING F | TYPE B & BL LEFT ARM E SIGN SPACING G | TYPE B & BL LEFT ARM E SIGN SPACING H | TYPE B & BL LEFT ARM E SIGN SPACING H' | TYPE B & BL RIGHT ARM K SIGNAL SPACING L | TYPE B & BL RIGHT ARM K SIGNAL SPACING M | TYPE B & BL RIGHT ARM K SIGNAL SPACING N | TYPE B & BL RIGHT ARM K SIGNAL SPACING N' | TYPE B & BL RIGHT ARM K SIGN SPACING L | TYPE B & BL RIGHT ARM K SIGN SPACING M | TYPE B & BL RIGHT ARM K SIGN SPACING N | TYPE B & BL RIGHT ARM K SIGN SPACING N' | TYPE B & BL INCLUDED ANGLE | LUMINAIRE BRACKET ARM* 4 FT. | LUMINAIRE BRACKET ARM* 6 FT. | LUMINAIRE BRACKET ARM* 8 FT. | LUMINAIRE BRACKET ARM* 10 FT. | LUMINAIRE BRACKET ARM* 12 FT. | LUMINAIRE BRACKET ARM* 15 FT. |
|---|---|---

EFFECTIVE: 10-01-2015

CONDUIT (WITH #14 TRACER WIRE)

FROM	TO	CENTER TO CENTER DISTANCE	LOOP DET.	TRENCH				PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"		2"	3"	4"	2"	3"	4"	2"	3"		
∅	P.S.	10'		18'													SUBSIDIARY TO P.S.
P.S.	1	111'		114'													
P.S.	⊠	92'		96'													
⊠	1	17'				20'											
⊠	1	17'				20'											
⊠	1	17'		20'													
1	①	20'		21'													
1	9	12'			13'												
1	2	66'								64'							
2	②	15'			16'												
2	3	34'								32'							
3	③	12'		13'													
1	5	94'								92'							
5	⑥	8'			9'												
5	⑦	13'		14'													
5	⑧	35'		36'													
5	4	68'								66'							
4	④	9'			10'												
4	⑤	8'		9'													

EFFECTIVE 04-01-2018

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
					CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
							SIGNALS	LIGHTING				
EB U.S. 24 HWY	27+66	133'Rt.	Type 1		15 Amps	15 Amps	100 Amps	Amps		Amps	Ct. Ft.	
			Type		15 Amps	Amps	Amps	Amps		Amps	Ct. Ft.	

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH		COORDINATION INTERFACE *						TIME * CLOCK	NEMA CABINET TYPE *			170 CABINET TYPE *		170 SOFTWARE *	
							TYPE		12C/7C HARDWIRE (1)		TIME BASE	CLOSED LOOP		FIBER								
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I	II	MASTER	LOCAL		NEMA	170			E	EV	DOUBLE	332	336S	BITRAN	WAPITI
EB U.S. 24 HIGHWAY	27+74	50'Rt.			1												1					

NEMA DETECTOR ASSIGNMENT

		CARD POSITION							
		1	2	3	4	5	6	7	8
CHANNEL	1		VIDEO						
	2								

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8
EBL Ø1	WB Ø2	NBL Ø3	SB Ø4	WBL Ø5	EB Ø6	SBL Ø7	NB Ø8
9	10	11	12	13	14	15	16
PED Ø2 FYL OLM	PED Ø4 FYL OLN	PED Ø6 FYL OLO	PED Ø8 FYL OLP	FUTURE	FUTURE	FUTURE	FUTURE

SIGNAL SIGNS

QUANTITY	MUTCD SIGN NUMBER	SIZE INCHES	AREA SQ.FT.	SIGN TOTAL AREA ITEM NO. 90208.33 SQ.FT.	SIGNAL SIGN MOUNTING HARDWARE ITEM NO. 90208.34 EA.
	R10-10L	24 X 30	5.0		
	R10-10R	24 X 30	5.0		
	R3-5L	30 X 36	7.5		
	R3-5R	30 X 36	7.5		
	R3-5A	30 X 36	7.5		
	R3-6L	30 X 36	7.5		
	R3-6R	30 X 36	7.5		
	R3-2	24 X 24	4.0		
	R3-1	24 X 24	4.0		
	R3-3	24 X 24	4.0		
2	D3-1 (SP-1)	72 X 18	9.0	18.0	2
2	D3-1 (SP-4)	78 X 18	9.75	19.5	2
6	R10-3E	9 X 15	0.9		
	R10-11A	24 X 30	5.0		
	R10-12	30 X 36	7.5		
4	R10-27A	30 X 36	7.5	30.0	4
			SUBTOTAL	67.5	8
			TOTAL	67.5	8

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE				
		PUSH BUTTON	INDUCTION LOOP (2)			VIDEO
			STANDARD	DELAY/ EXTEND *	CALL UNIT *	
50	WB US 24 HWY					X
20	WB US 24 HWY					X
21	WB US 24 HWY					X
30	NB NORTHERN					X
80	NB NORTHERN					X
81	NB NORTHERN					X
10	EB US 24 HWY					X
60	EB US 24 HWY					X
61	EB US 24 HWY					X
70	SB NORTHERN					X
40	SB NORTHERN					X
41	SB NORTHERN					X
22	SB NORTHERN	1				
23	SB NORTHERN	1				
82	EB US 24 HWY	1				
83	EB US 24 HWY	1				
62	SB NORTHERN	1				
63	SB NORTHERN	1				
TOTAL		6				

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

(1) MoDOT "D" PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS WITH 7C HARDWIRE INTERCONNECT.

(2) PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.

(3) FLASHING YELLOW ARROW (FYA) SHALL BE PROGRAMMED IN MODE G.

(4) MMU2 WITH ETHERNET PORT IS REQUIRED FOR FLASHING YELLOW ARROW (FYA).

(5) COUNTDOWN PEDESTRIAN HEADS SHALL BE PAID FOR AS COUNTDOWN PEDESTRIAN SIGNAL HEAD, TYPE 1S.

(6) VIDEO DETECTION TO BE PAID FOR AS KC DISTRICT VIDEO DETECTION SYSTEM.

MISC. BID ITEM SUMMARY

BID ITEM	QUANTITY	UNITS
WIRELESS RADIO SYSTEM RELOCATION	1	EACH
CCTV CAMERA ASSEMBLY RELOCATION		EACH
EMERGENCY VEHICLE PRE-EMPTION SYSTEM	1	EACH
VIDEO DETECTION CAMERA RELOCATION		EACH
KC DISTRICT VIDEO DETECTION SYSTEM	1	EACH
COUNTDOWN PEDESTRIAN SIGNAL HEAD, TYPE 1S	6	EACH
ACCESSIBLE PEDESTRIAN SIGNAL	6	EACH

R10-27a

R10-3eR

R10-3eL

R10-3 SIGNS ARE SHOWN FOR INFORMATION ONLY AND SHALL BE INCIDENTIAL TO THE ACCESSIBLE PEDESTRIAN SIGNAL BID ITEM.

1.875" Radius, 0.750" Border, White on Green: "U.S. 24 Hwy", D Font:
D3-1 (SP-1)

1.875" Radius, 0.750" Border, White on Green: "Northern Blvd", D Font:
D3-1 (SP-4)

HWY 24 & NORTHERN BLVD
INTERSECTION

D-37C

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	113

COUNTY JACKSON

JOB NO. JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

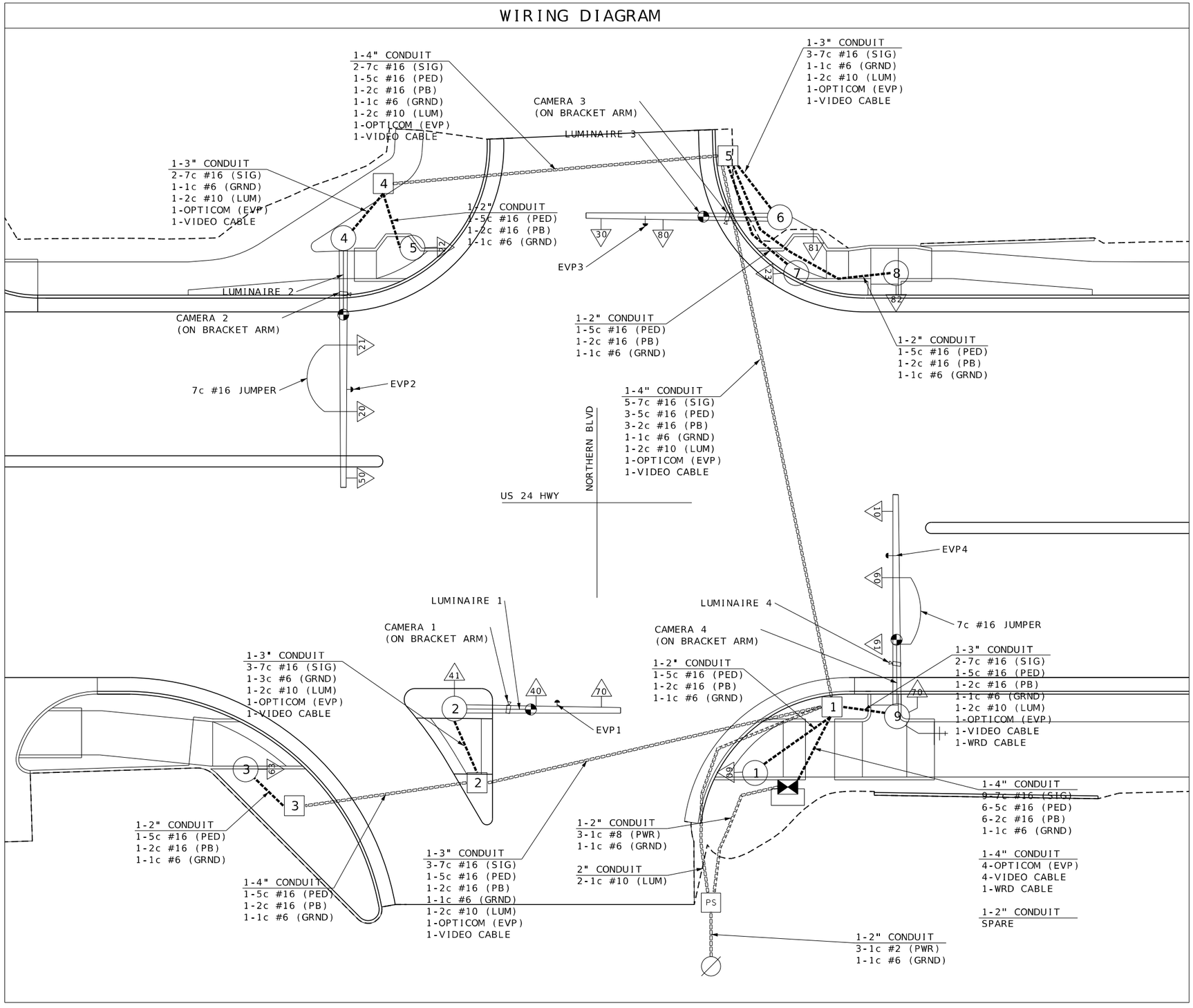
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

EFFECTIVE 12-01-17

WIRING DIAGRAM



LEGEND

- SIGNAL HEAD WITH NUMBER
- PULL BOX WITH NUMBER
- SIGNAL POLE WITH NUMBER
- SIGNAL CONTROLLER
- POWER SOURCE
- WIRELESS RADIO DEVICE
- EMERGENCY VEHICLE PREEMPTION DETECTOR
- VIDEO CAMERA
- CCTV
- LUMINAIRE
- POWER SUPPLY
- TRENCHED CONDUIT
- PUSHED CONDUIT

SIG	VEHICLE SIGNAL CABLE
PED	PEDESTRIAN SIGNAL CABLE
PB	PEDESTRIAN PUSH BUTTON CABLE
LUM	LUMINAIRE CABLE
PWR	POWER CABLE
EVP	EMERGENCY VEHICLE PREEMPTION CABLE
GRND	GROUND CABLE
CCTV	CAT 5e, OUTDOOR RATED, SHIELDED CABLE
WRD	WIRELESS RADIO DEVICE

HWY 24 & NORTHERN BLVD

INTERSECTION

D-37D

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000876
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	114

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
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Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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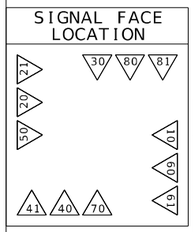
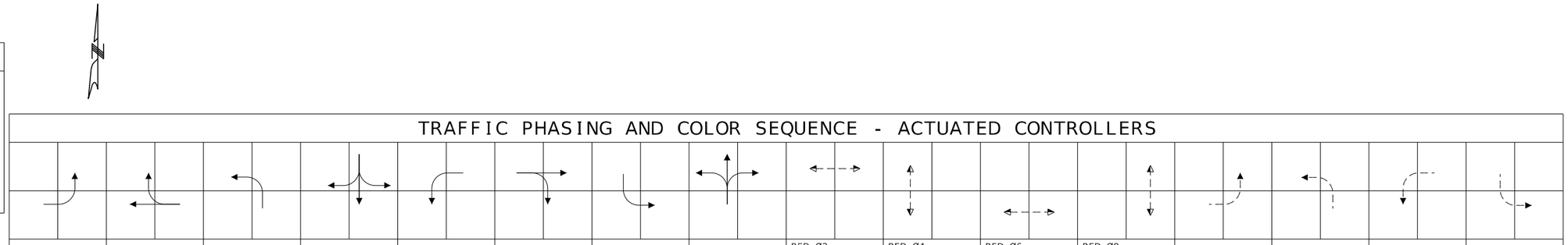
EFFECTIVE 12/01/2017

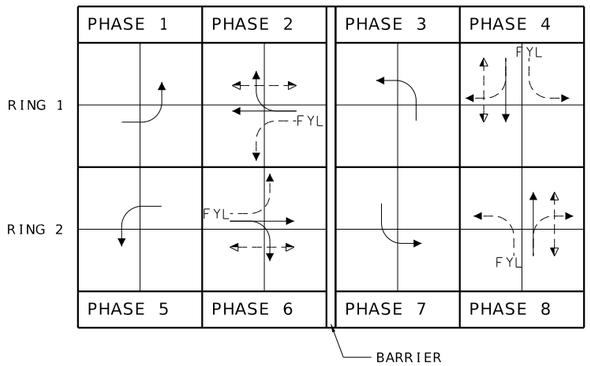
SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS



	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	PED Ø2 OVERLAP	PED Ø4 OVERLAP	PED Ø6 OVERLAP	PED Ø8 OVERLAP	OVERLAP M	OVERLAP N	OVERLAP O	OVERLAP P	
FACE NUMBERS	10	20 21	30	40 41	50	60 61	70	80 81	22 23		62 63	82 83	10	30	50	70	FACE NUMBERS
SIGNAL INDICATIONS R	RL	R R	RL	R R	RL	R R	RL	R R	DW DW		DW DW	DW DW					R
SIGNAL INDICATIONS Y	YL	Y Y	YL	Y Y	YL	Y Y	YL	Y Y	FDW FDW		FDW FDW	FDW FDW					Y
SIGNAL INDICATIONS FYL													FYL	FYL	FYL	FYL	FYL
SIGNAL INDICATIONS G	L	G G	L	G G	L	G G	L	G G	W W		W W	W W					G
DETECTOR ASSIGNMENTS	10	20 21	30	40 41	50	60 61	70	80 81									DETECTOR ASSIGNMENTS
DETECTOR ASSIGNMENTS (PEDS. ONLY)									22 23		62 63	82 83					
OVERLAP PARENT PHASES													2	4	6	8	



RING STRUCTURE

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

FLASHING OPERATION	
US 24 HWY	FR
NORTHERN BLVD	FR

CONTROLLER TYPE	

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF HWY 24

WITH NORTHERN BLVD

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED

FDW — FLASHING DON'T WALK
W — WALK
DW — DON'T WALK
R/W — RIGHT OF WAY INTERVAL
YRt — YELLOW RIGHT ARROW
RT. — GREEN RIGHT ARROW
LY -YL — YELLOW LEFT ARROW
L — GREEN LEFT ARROW
S — GREEN STRAIGHT AHEAD ARROW
G — CIRCULAR GREEN
Y — CIRCULAR YELLOW
R — CIRCULAR RED
RL — RED LEFT ARROW
Ø — TRAFFIC PHASE
AO — ALL OTHERS
FR — FLASHING RED
FY — FLASHING CIRCULAR YELLOW
FYL — FLASHING YELLOW LEFT ARROW

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	115

COUNTY: JACKSON

JOB NO.: JKU0226

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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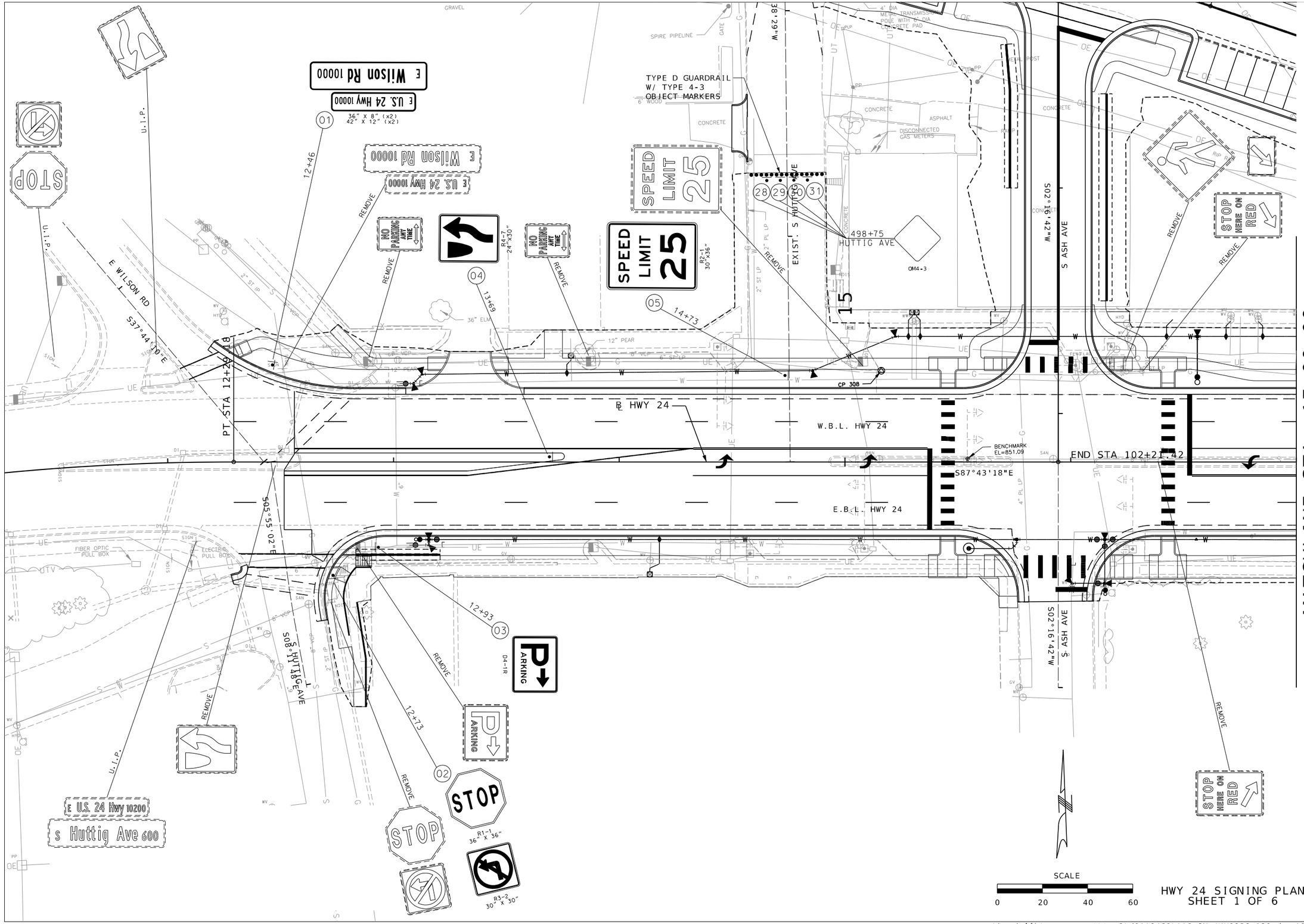

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	116

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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REV.	DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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MATCHLINE STA. 17+00.00

MATCHLINE STA. 22+60.00

PT STA 206+78.69

PT STA 206

S68°55'47"E

S28°45'W

S ASH AVE EXIST

S HARDY AVE

S LAKE DR

HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

POT STA 18+93.79

S20°26'44"W

S87°33'16"E

S15°15'06"W

S20°26'44"W

137+69

18+17

19+11

20+80

21+12

21+52

21+18

CP 307

20

REMOVE

STOP

E U.S. 24 Hwy 10200
S Ash Ave 500

E U.S. 24 Hwy 10300
S Hardy Ave 500

E U.S. 24 Hwy 10400
S Hardy Ave 600

E U.S. 24 Hwy 10400
S Lake Dr 600

NO PARKING ANY TIME

SPEED LIMIT 25

R1-1 36" X 36" 42" X 12" (x2) 36" X 8" (x2)

R4-7 24"x30"

R5-2 24"x24"

R4-2 30"x36"

3" DIA STEEL TRANSMISSION POLE WITHOUT LIGHT

6' CHAINLINK STONE RETAINING WALL

BOLLARDS

CONCRETE

8" PEAR

SPRINKLER VALVE

TRANSMISSION POLE

3.5' DIA ATT MANHOLE WITH UNDERGROUND TELEPHONE MARKER

5" ORNAMENTAL

FIBER OPTIC BOX

SCALE

0 20 40 60

HWY 24 SIGNING PLAN
SHEET 2 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	
8/4/2025	
ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	117
COUNTY	
JACKSON	
JOB NO.	
JKU0226	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION	REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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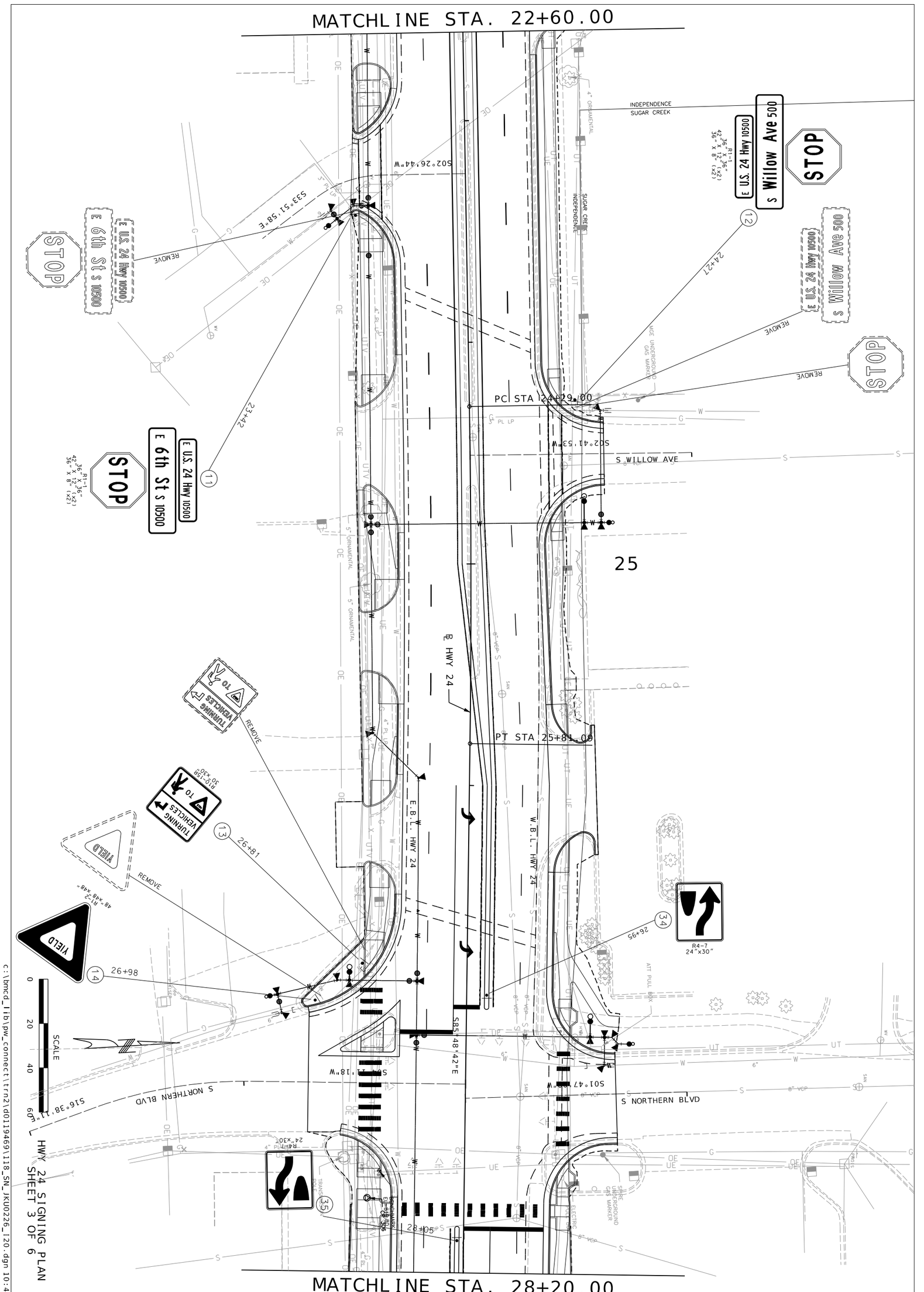

BURNS McDONNELL
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Kansas City, MO 64114
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

DATE	DESCRIPTION

BRIDGE NO.
PROJECT NO.
CONTRACT ID. JKU0226
JOB NO.
COUNTY JACKSON
DISTRICT KC
SHEET NO. 118
ROUTE 24
STATE MO
DATE PREPARED 8/4/2025

THIS SHEET HAS BEEN SIGNED AND DATED ELECTRONICALLY

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010030879
PROFESSIONAL ENGINEER

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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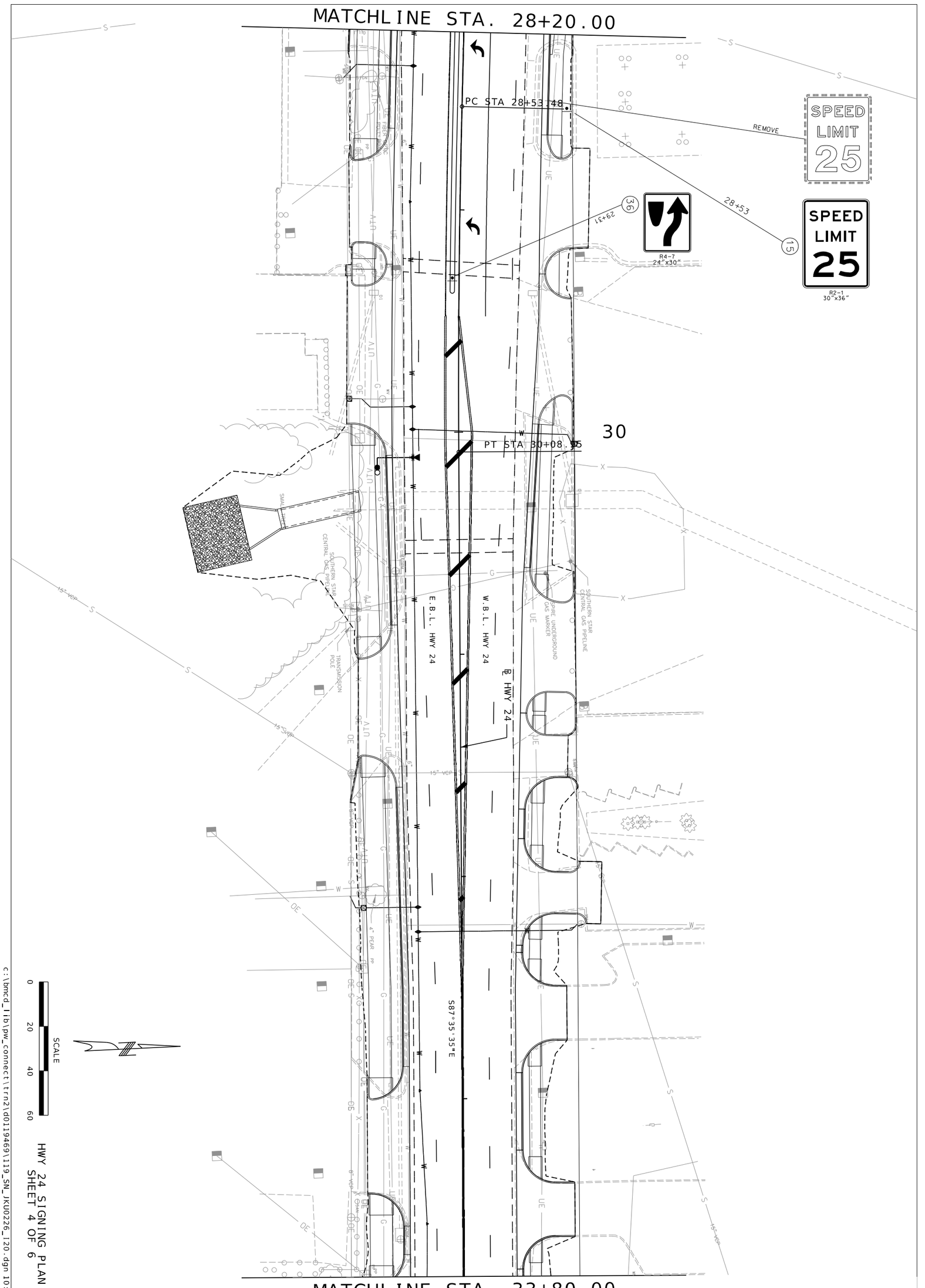

SCALE 0 20 40 60

HWY 24 SIGNING PLAN
SHEET 4 OF 6

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No. : 000165

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

DATE	DESCRIPTION

BRIDGE NO.
PROJECT NO.
CONTRACT ID.
JOB NO. JKU0226
COUNTY JACKSON
DISTRICT KC
SHEET NO. 119
ROUTE 24
STATE MO
DATE PREPARED 8/4/2025

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF MISSOURI RONNIE L. WILLIAMS NUMBER PE-2010000879 PROFESSIONAL ENGINEER

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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MATCHLINE STA. 33+80.00

MATCHLINE STA. 39+40.00

STOP

S Carlisle Ave 600

W US. 24 Hwy 11200

16 R1-1 36" X 36" 48" X 12" (x2) 36" X 8" (x2)

STOP

33+92

S CARLISLE AVE

15" VCP

SAN

REMOVE

S04°10'00"W

35

POT STA. 35+27.62

OE

BILLBOARD

SMALL TREES

℄ HWY 24

W.B.L. HWY 24

E.B.L. HWY 24

S87°44'38"E

UE

UTV

G

W

WV

8" W

2" GAS

PULL BOX

HYDRANT

3.5' DIA STEEL TRANSMISSION POLE

ASPHALT

WITH UGT

TRANSMISSION POLE

8" VCP

2" PEAR

3" MAPLE

3" MAPLE

ASPHALT

3" PEAR

8" WOOD

3" PEAR

SANITARY CLEAN OUT

CONCRETE

HOUSE

WINDOW WELL

10" CRABAPPLE

FLOWER BED

6" CRABAPPLE

6" CRABAPPLE

DUMPSTER

GATE CONCRETE

ASPHALT

3" PEAR

5" PEAR

WATER VAULT

26" ASH

15"

CONC RETAINING WALL

37+77

17

STOP

R1-1

36" X 36"

SCALE

0 20 40 60

HWY 24 SIGNING PLAN
SHEET 5 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	120

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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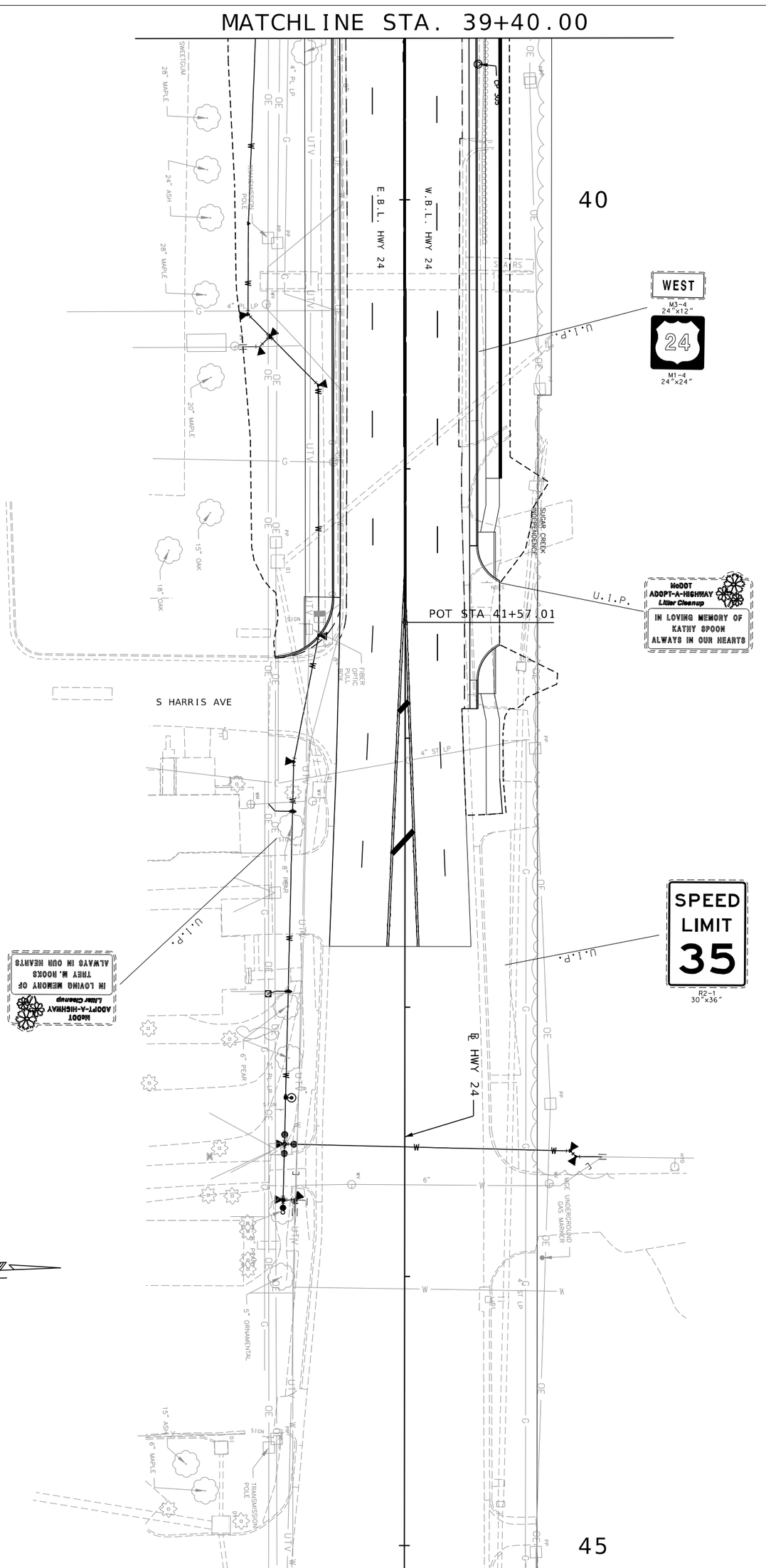

HWY 24 SIGNING PLAN
SHEET 6 OF 6

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BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

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

DATE	DESCRIPTION

BRIDGE NO.
PROJECT NO.
CONTRACT ID. JKU0226
JOB NO.
COUNTY JACKSON
DISTRICT KC
SHEET NO. 121
ROUTE 24
STATE MO
DATE PREPARED 8/4/2025

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF MISSOURI
BONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

REV.

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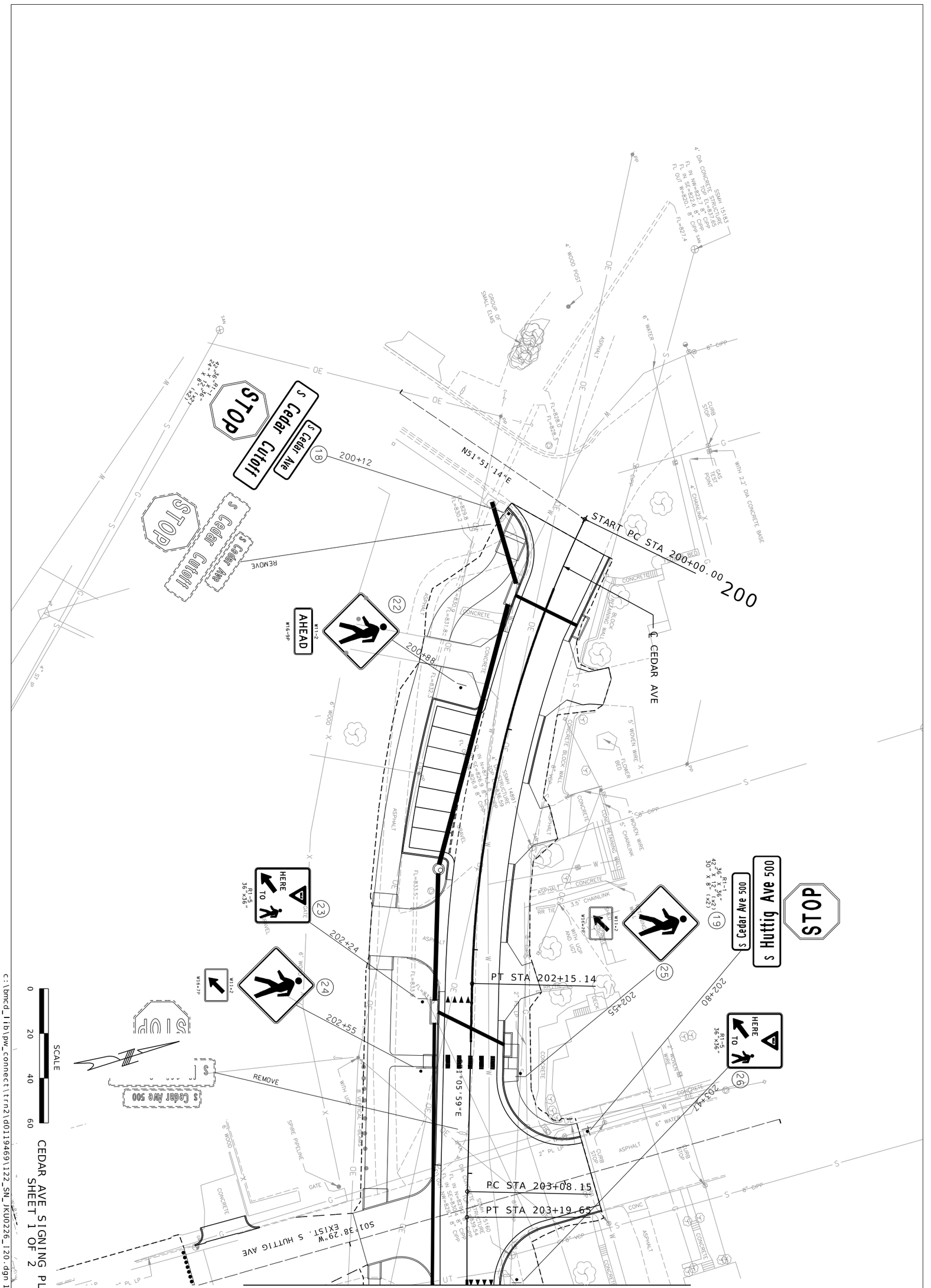

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

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

DATE	DESCRIPTION

BRIDGE NO.
PROJECT NO.
CONTRACT ID.
JOB NO. JKU0226
COUNTY JACKSON
DISTRICT KC
SHEET NO. 122
ROUTE 24
STATE MO
DATE PREPARED 8/4/2025

THIS SHEET HAS BEEN SIGNED AND DATED ELECTRONICALLY

STATE OF MISSOURI
BONNIE L. WILLIAMS
NUMBER PE-2010003819
PROFESSIONAL ENGINEER

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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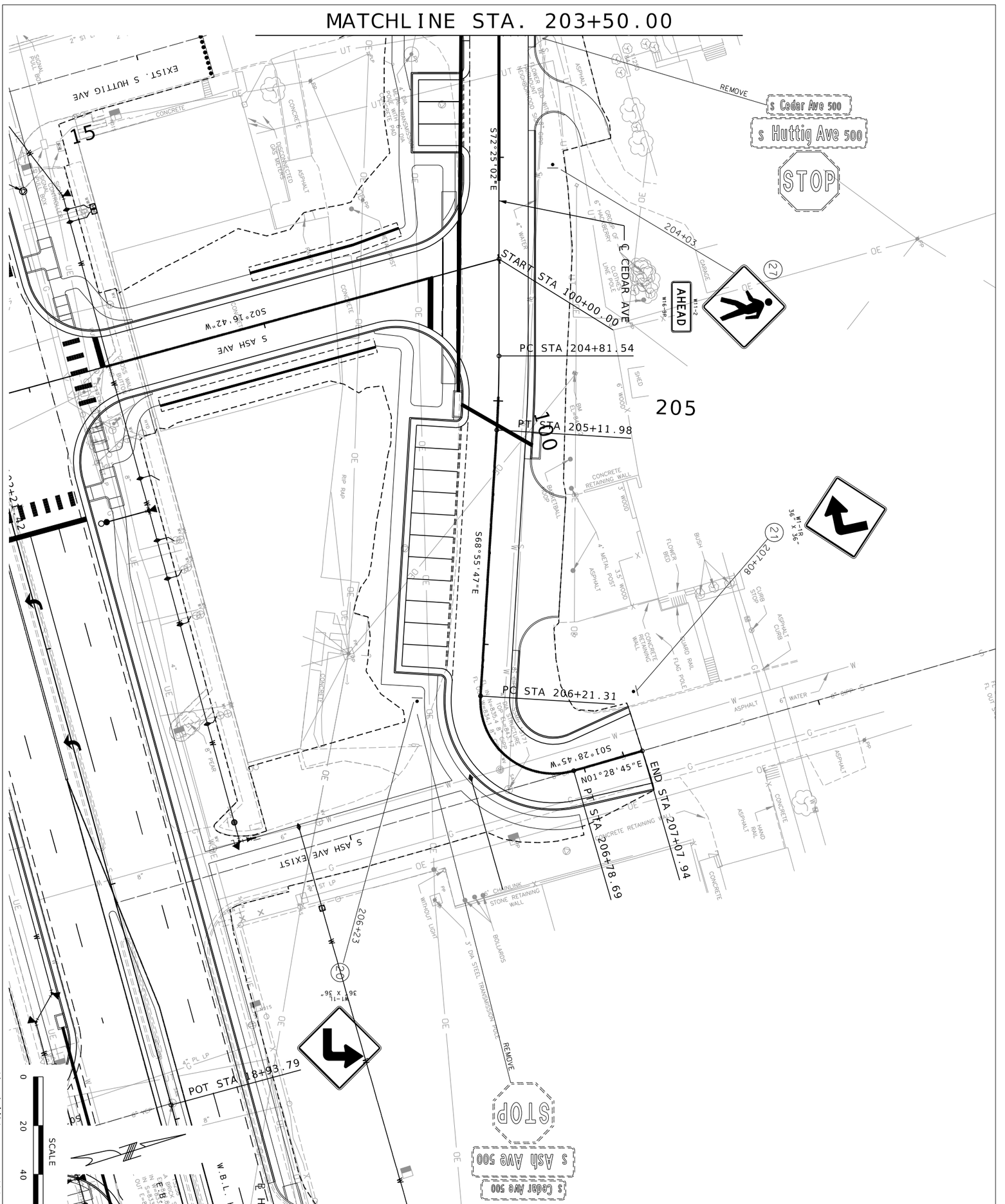

CEDAR AVE SIGNING PLAN
SHEET 2 OF 2

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BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

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

DATE	DESCRIPTION

BRIDGE NO.
PROJECT NO.
CONTRACT ID. JKU0226
JOB NO.
COUNTY JACKSON
DISTRICT KC
SHEET NO. 123
ROUTE 24
STATE MO
DATE PREPARED 8/4/2025

THIS SHEET HAS BEEN SIGNED AND DATED ELECTRONICALLY

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010008819
PROFESSIONAL ENGINEER

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

ASH AVE SIGNING PLAN
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	124

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

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SIGNS						CONCRETE FOOTINGS EMBEDDED	STRUCTURAL STEEL POSTS *						PIPE POSTS *					BACKING BARS **				U-CHANNEL POST	PERFORATED SQUARE STEEL TUBE												REMARKS AND OTHER REQUIRED ITEMS
902 SIGNAL SIGNS TABULATED ON D-37A SHEET																						2 IN. POST						2.5 IN. POST						
																									ANCHORS					ANCHORS			BREAK-AWAY ASSEMBLY	
SIGN NO.	SIGN SIZE	STATION	HORZ CLEAR IF NOT STD	LOCATION	SIGN DTL. SHT. NO.	ITEM NO. 9031010	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL ITEM NO. 9031210	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220	2" X 3/8" BARS @ 2.55 LBS PER FT NO. EACH	LGTH TOTAL IN.	TOTAL LF	TOTAL LBS	ITEM NO. 9031250A	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031270A	DRIVEN 12-GA. ITEM NO. 9031271A	DRIVEN 7-GA. ITEM NO. 9031273A	CONCRETE 7-GA. ITEM NO. 9031274	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031280	2.25" INSERT (6 FT) ITEM NO. 9031272A	DRIVEN 7-GA. ITEM NO. 9031281A	CONCRETE 7-GA. ITEM NO. 9031285	ITEM NO. 9031241	
						CY		LF	LF	LF		LBS	IN.	LF	LF		LBS	EACH	IN.	LF	LBS	LF	LF	LF		EA	EA	EA	LF	LF		EA	EA	EA	EA	
1	42" x 12"	12+46		24 Hwy																			11.8		11.8	1									
	36" x 8"																																		
2	36" x 36"	12+73		24 Hwy																			15.6		15.6	1									
	30" x 30"																																		
3	30" x 24"	12+93		24 Hwy																			12.0		12.0	1									
4	24" x 30"	13+69		24 Hwy																			12.5		12.5	1									
5	30" x 36"	14+73		24 Hwy																			13.0		13.0	1									
6	36" x 36"	19+11		24 Hwy																			14.9		14.9	1									
	42" x 12"																																		
	36" x 8"																																		
7	36" x 36"	20+80		24 Hwy																			14.9		14.9	1									
	36" x 12"																																		
	36" x 8"																																		
8	36" x 36"	21+12		24 Hwy																			14.9		14.9	1									
	42" x 12"																																		
	36" x 8"																																		
9	30" x 36"	21+18		24 Hwy																			13.0		13.0	1									
10	24" x 24"	21+52		24 Hwy																			12.0		12.0	1									
11	36" x 36"	23+42		24 Hwy																			14.9		14.9	1									
	42" x 12"																																		
	36" x 8"																																		
12	36" x 36"	24+27		24 Hwy																			14.9		14.9	1									
	42" x 12"																																		
	36" x 8"																																		
13	30" x 30"	26+81		24 Hwy																			12.5		12.5	1									
14	48" x 48" x 48"	26+98		24 Hwy																			13.2		13.2	1									
15	30" x 36"	28+53		24 Hwy																			13.0		13.0	1									
16	36" x 36"	33+92		24 Hwy																			14.9		14.9	1									
	48" x 12"																																		
	36" x 8"																																		
17	36" x 36"	37+77		24 Hwy																			13.0		13.0	1									
18	36" x 36"	200+12		Cedar Ave																			14.9		14.9	1									
	42" x 12"																																		
	24" x 8"																																		
19	36" x 36"	202+80		Cedar Ave																			14.9		14.9	1									
	42" x 12"																																		
	36" x 8"																																		
20	36" x 36"	206+23		Cedar Ave																			14.1		14.1	1									
21	36" x 36"	207+08		Cedar Ave																			14.1		14.1	1									
22	36" x 36"	100+40		Ash Ave																			14.9		14.9	1									
	42" x 12"																																		
	36" x 8"																																		
23	30" x 30"	202+24		Cedar Ave																			14.0		14.0	1									
24	30" x 30"	202+55		Cedar Ave																			14.0		14.0	1									
	24" x 12"																																		
25	30" x 30"	202+55		Cedar Ave																			14.0		14.0	1									
	24" x 12"																																		
26	30" x 30"	203+47		Cedar Ave																			14.0		14.0	1									
27	30" x 30"	204+03		Cedar Ave																			14.0		14.0	1									
	24" x 12"																																		
28	18" x 18"	498+75		Huttig Ave																			10.0		10.0	1									
29	18" x 18"	498+75		Huttig Ave																			10.0		10.0	1									
30	18" x 18"	498+75		Huttig Ave																			10.0		10.0	1									
31	18" x 18"	498+75		Huttig Ave																			10.0		10.0	1									
32	30" x 30"	200+88		Cedar Ave																			14.0		14.0	1									
	24" x 12"																																		
33	24" x 30"	18+17		24 Hwy																			12.5		12.5	1									
34	24" x 30"	26+95		24 Hwy																			12.5		12.5	1									
35	24" x 30"	28+05		24 Hwy																			12.5		12.5	1									
36	24" x 30"	29+31		24 Hwy																			12.5		12.5	1									
SUBTOTAL																								477.9	36									

* BREAKAWAY ASSEMBLY IS INCIDENTAL FOR STRUCTURAL STEEL AND PIPE POSTS.
** BACKING BARS ARE TOTALED WITH STRUCTURAL STEEL OR PIPE POSTS.

D-29

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE 24 | STATE MO
DISTRICT KC | SHEET NO. 125
COUNTY JACKSON
JOB NO. J4S3405
CONTRACT ID. .
PROJECT NO. .
BRIDGE NO. .

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV. | DESCRIPTION | DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certifcate of Authority
No.: 000165

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EFFECTIVE 10-01-2016

STANDARD SIGN ASSEMBLIES

SIGN NUMBER	STATION	LOCATION	TYPE: R1-1 36"X36"	R1-2 48"X48"	R1-5 36"X36"	R2-1 30"X36"	R3-2 30"X30"	R4-7 24"X30"	R5-2 24"X24"	R10-15R 30"X30"	W1-1L 36"X36"	W1-1R 36"X36"	D4-1R 30"X24"	OM4-3 18"X18"	W11-2 30"X30"	W16-7P 24"X12"	W16-9P 24"X12"	ST SIGN 24"X8" ■ US 24 Hwy ###	ST SIGN 30"X8" ■ US 24 Hwy ###	ST SIGN 36"X8" ■ US 24 Hwy ###	ST SIGN 36"X12" ■ Willis Ave ###	ST SIGN 42"X12" ■ Willis Ave ###	ST SIGN 48"X12" ■ Willis Ave ###	MISC. SIGNS
			SIGN DESCRIPTION, SIZES & NUMBER OF EACH: STOP			SPEED LIMIT 25											AHEAD							MISC. SIGNS
1	12+46	US 24 HWY																		2		2		
2	12+73	US 24 HWY	1				1																	
3	12+93	US 24 HWY											1											
4	13+69	US 24 HWY						1																
5	14+73	US 24 HWY				1																		
6	19+11	US 24 HWY	1																	2		2		
7	20+80	US 24 HWY	1																	2	2			
8	21+12	US 24 HWY	1																	2		2		
9	21+18	US 24 HWY				1																		
10	21+52	US 24 HWY							1															
11	23+42	US 24 HWY	1																	2		2		
12	24+27	US 24 HWY	1																	2		2		
13	26+81	US 24 HWY								1														
14	26+98	US 24 HWY		1																				
15	28+53	US 24 HWY				1																		
16	33+92	US 24 HWY	1																	2			2	
17	37+77	US 24 HWY	1																					
18	200+12	CEDAR AVE	1															2				2		
19	202+80	CEDAR AVE	1																2			2		
20	206+23	CEDAR AVE									1													
21	207+08	CEDAR AVE										1												
22	100+40	ASH AVE	1																2		2			
23	202+24	CEDAR AVE								1														
24	202+55	CEDAR AVE													1	1								
25	202+55	CEDAR AVE													1	1								
26	203+47	CEDAR AVE								1														
27	204+03	CEDAR AVE													1		1							
28	498+75	HUTTIG AVE												1										
29	498+75	HUTTIG AVE												1										
30	498+75	HUTTIG AVE												1										
31	498+75	HUTTIG AVE												1										
32	200+88	CEDAR AVE													1		1							
33	18+17	US 24 HWY						1																
34	26+95	US 24 HWY						1																
35	28+05	US 24 HWY						1																
36	29+31	US 24 HWY						1																
TOTAL			11	1		3	1	5	1	1	1	1	1	4	4	2	2	2	4	14	4	14	2	

SIGN SUMMARY

STANDARD SIGN OR SPECIAL SIGN NUMBER	SIGN DETAIL SHEET NO.	NO. EACH	SIZE, TYPE & SQUARE FEET: SIZE	FLAT SHEET SH ITEM NO. 9035004A	FLAT SHEET FLUORESCENT SHF * ITEM NO. 9035069A
R1-1		11	36"X36"	82.04	
R1-2		1	48"X48"X48"	6.93	
R1-5			36"X36"	0.00	
R2-1		3	30"X36"	22.50	
R3-2		1	30"X30"	6.25	
R4-7		5	24"X30"	25.00	
R5-2		1	24"X24"	4.00	
R10-15R		1	30"X30"	6.25	
W1-1L		1	36"X36"	9.00	
W1-1R		1	36"X36"	9.00	
DR-1R		1	30"X24"	5.00	
ST SIGN		10	36"X8"	20.00	
ST SIGN		10	36"X12"	30.00	
OM4-3		4	18"X18"	9.00	
W11-2		4	30"X30"	25.00	
W16-7P		2	24"X12"	4.00	
W16-9P		2	24"X12"	4.00	
			SUBTOTAL	267.97	
			TOTAL	268.0	

* ORANGE, YELLOW & YELLOW/GREEN

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	126

COUNTY: JACKSON

JOB NO.: J4S3405

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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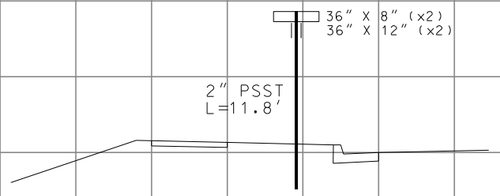

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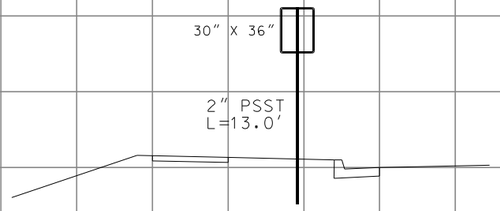

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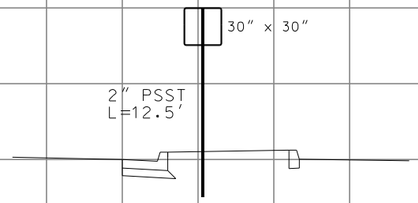

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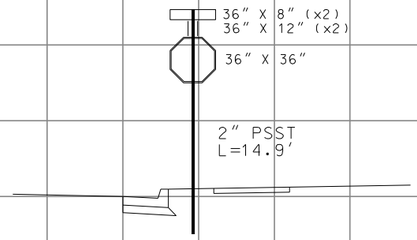
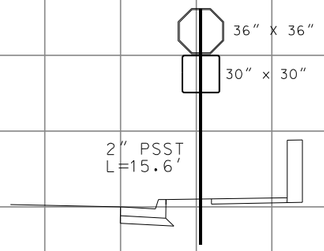


(18) 200+12

(19) 202+80



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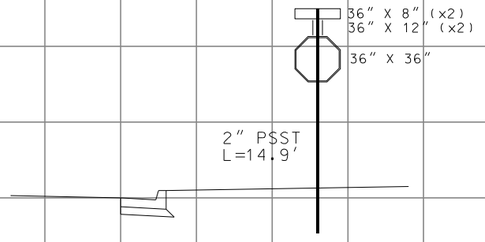


(06) 19+11

(07) 20+80

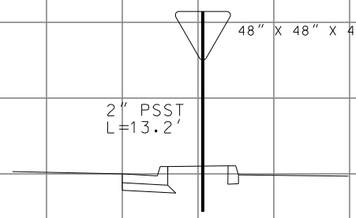
(08) 21+12

(11) 23+42

(12) 24+27

(16) 33+92

(22) 100+40



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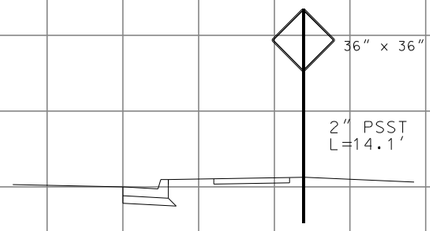

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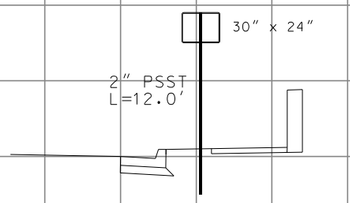

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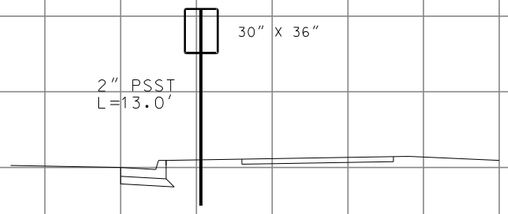

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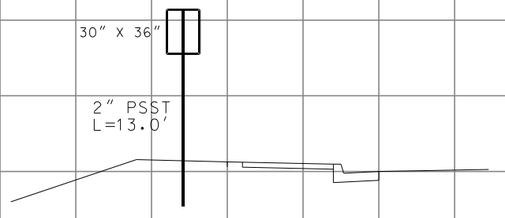

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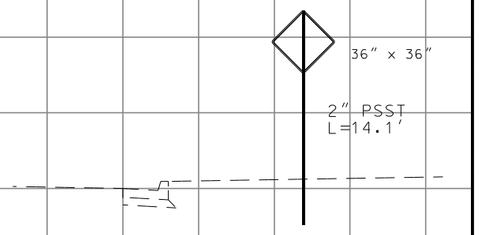

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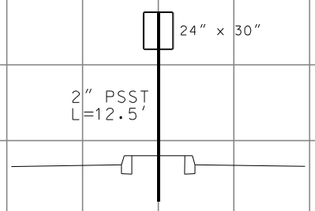

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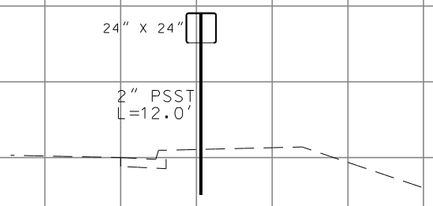

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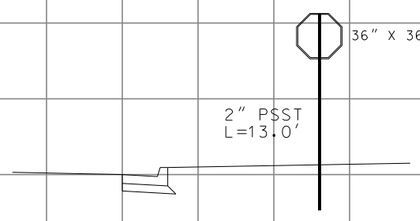
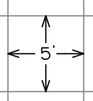


(17) 37+77



SIGNING SECTIONS
SHEET 01 OF 01

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	127

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.
.

PROJECT NO.
.

BRIDGE NO.
.

DESCRIPTION	DATE
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IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

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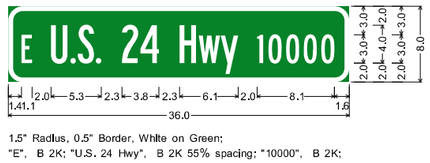
1.5" Radius, 0.5" Border, White on Green;
"E", B 2K; "Wilson", B 2K; "Rd", B 2K; "10000", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Willow", B 2K; "Ave", B 2K; "500", B 2K;

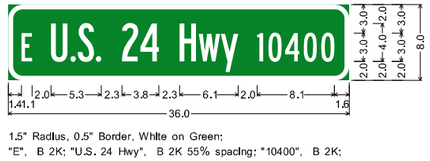


1.5" Radius, 0.5" Border, White on Green;
"E", B 2K; "U.S. 24 Hwy", B 2K 55% spacing; "10000", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Cedar", B 2K; "Ave", B 2K;
"500", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Hardy", B 2K; "Ave", B 2K; "600", B 2K;

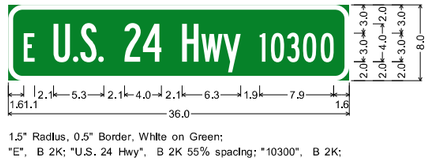
1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Ash", B 2K; "Ave", B 2K; "500", B 2K;



1.5" Radius, 0.5" Border, White on Green;
"E", B 2K; "U.S. 24 Hwy", B 2K 55% spacing; "10400", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Lake", B 2K; "Dr", B 2K; "600", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Carlisle", B 2K; "Ave", B 2K; "600", B 2K;

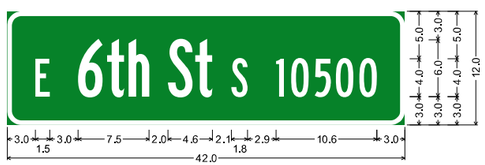


1.5" Radius, 0.5" Border, White on Green;
"E", B 2K; "U.S. 24 Hwy", B 2K 55% spacing; "10300", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Hardy", B 2K; "Ave", B 2K; "500", B 2K;

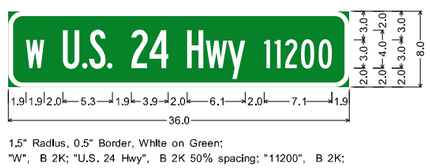
1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Cedar", B 2K; "Cutoff", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"E", B 2K; "U.S. 24 Hwy", B 2K 55% spacing; "10500", B 2K;



1.5" Radius, 0.5" Border, White on Green;
"E", B 2K; "6th", B 2K; "St", B 2K; "S", B 2K; "10500", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Huttig", B 2K; "Ave", B 2K; "500", B 2K;



1.5" Radius, 0.5" Border, White on Green;
"W", B 2K; "U.S. 24 Hwy", B 2K 50% spacing; "11200", B 2K;

1.5" Radius, 0.5" Border, White on Green;
"S", B 2K; "Cedar", B 2K; "Ave", B 2K;

SIGN FACE DETAILS
SHEET 01 OF 01

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	128

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.
.

PROJECT NO.
.

BRIDGE NO.
.

DESCRIPTION	DATE
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.	.
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.	.
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.	.
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.	.

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

LIGHTING GENERAL NOTES:

1. CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND RECEIVE APPROVAL FROM IPL PRIOR TO CONSTRUCTION OF LIGHT POLES TO CONFIRM MIN. OVERHEAD/UNDERGROUND CLEARANCES ARE MET. WHERE POLES ARE IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES, CONTRACTOR SHALL POTHOLE THE UTILITIES TO CONFIRM CONFLICTS ARE AVOIDED AND CLEARANCES ARE MET.

2. LIGHTING INFRASTRUCTURE SHALL GENERALLY FOLLOW CURRENT MODOT STANDARDS AND SPECIFICIATIONS, AND INDEPEDENCE POWER AND LIGHT (IPL) STANDARDS AND SPECIFICATIONS. IPL'S STANDARDS AND SPECIFICATIONS CAN BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST. UNLESS OTHERWISE NOTED IN THE PLANS, THE FOLLOWING EQUIPMENT SHALL FOLLOW IPL STANDARDS AND SPECIFICATIONS:

   A. IPL'S STANDARD 40' SINGLE 8' ARM CONTEMPORARY STREET LIGHT POLES AND ASSOCATED POLE EQUIPMENT SHOWN IN THE IPL POLE DETAILS INCLUDED IN THESE PLANS SHALL BE PAID FOR PER EACH UNDER MODOT STANDARD BID ITEMS 9011064 "LIGHTING POLE, 45 FT. OR 13.5 M", AND 9011108 "BRACKET ARM, 8 FT. OR 2.4 M"

   B. IPLS' STANDARD 234 WATT HOWARD LIGHTING LED LUMINAIRE, MODEL #:LRL1SMV24KGY1P72, SHALL BE PAID FOR PER EACH UNDER MODOT STANDARD BID ITEM 9011313 "LUMINAIRE, LED-C".

   C. IPL APPROVED SECONDARY BELOW GRADE PEDESTRAL PULL BOXES SHALL BE PAID FOR PER EACH UNDER MODOT STANDARD BID ITEM 9016110 "PULL BOX, PREFORMED CLASS 1". SHOWN IN IPL STANDARD DETAILS WITHIN THESE PLANS.

   D. IPL APPROVED TRIPLEX CONDUCTORS FOR SERVICE AND DISTRIBUTION SHALL BE FURNISHED AND INSTALLED BY IPL.

   E. IPL'S APPROVED 7' SCREW-IN POLE FOUNDATION FOR THEIR STANDARD 40' POLES SHALL BE PAID FOR PER EACH UNDER MODOT STANDARD BID ITEM 9018230 "POLE FOUNDATION (30 FT. OR 9.0 M MOUNTING HEIGHT)".

   F. CONCRETE FOUNDATIONS FOR IPL'S STANDARD 40' POLES SHALL BE PAID FOR PER EACH UNDER MODOT STANDARD BID ITEM 9018245 "POLE FOUNDATION (45 FT. OR 13.5 M MOUNTING HEIGHT)".

3. CONTRACTOR SHALL FURNISH AND CONSTRUCT A COMPLETE AND OPERATIONAL LIGHTING SYSTEM IN ACCORDANCE WITH THE NEC AND NESC.

4. UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID CONFLICTS. DAMAGE TO UTILITIES AS A RESULT OF CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.

QUANTITIES TABLE*

ITEM NO.	ITEM	UNIT	QUANTITY
9011064	LIGHTING POLE, 45 FT. OR 13.5 M	EA	26
9011108	BRACKET ARM, 8 FT. OR 2.4 M	EA	26
9011313	LUMINAIRE, LED-C	EA	26
9013002	CONDUIT, HDPE 2-inch Trenched	LF	1050
9014003	CONDUIT, HDPE 3-inch Pushed	LF	4050
9017110	CABLE, 10 AWG 1 CONDUCTOR, POLE AND BRACKET	LF	4134
9016110	PULL BOX, PREFORMED CLASS 1	EA	8
9019902	POLE FOUNDATION (30 FT. OR 9.0 M MOUNTING HEIGHT) [INSTALL ONLY]	EA	22
9010245	POLE FOUNDATION (45 FT. OR 13.5 M MOUNTING HEIGHT)	EA	4

*SEE LIGHTING GENERAL NOTES AND JOB SPECIAL PROVISIONS FOR MODOT PAY ITEM REFERENCES IN TABLE ABOVE RELATIVE TO IPL STANDARD EQUIPMENT & APPURTENANCES.

LIGHTING GENERAL NOTES
& QUANTITIES
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/6/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	129

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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LIGHTING LEGEND

□	PULL BOX (EXISTING)	▪	CONTROLLER, LIGHTING
◪	PULL BOX, QUAZITE	●—□	SINGLE ARM STANDARD POLE
□□□□□□	3" CONDUIT, RIGID (PUSHED)	⊘	EXISTING SECONDARY POWER SUPPLY
▬▬▬▬	2" CONDUIT, RIGID (TRENCH)	═══	CONDUIT, RIGID (EXISTING)

E WILSON RD

S37°44'10"E

EXISTING LUMINAIRE (UIP)

EXISTING LUMINAIRE (UIP)

PB-3
INSTALL QUAZITE PULL BOX
12+62.19
41.44' LT.
SEE NOTE 3

40' SINGLE ARM STANDARD POLE
LP-A1-1
14+11.53
36.96' LT.
SEE NOTE 1

300

400

S38°29'W

S HUTIG AVE

EXISTING IPL UTILITY AND SECONDARY POLE 060465 '1'
POWER SUPPLY 1
CIRCUIT A
SEE NOTE 2

PB-1
INSTALL QUAZITE PULL BOX
15+26.94
36.86' LT.

S02°16'42"W

40' SINGLE ARM STANDARD POLE
LP-A1-2
16+86.02
42.08' LT.

500

S87°43'18"E

600

S05°55'02"E

EXISTING PULL BOX

SPLICE PROPOSED CONDUCTORS WITH EXISTING CONDUCTORS INSIDE EXISTING PULL BOX. THIS WORK IS TO BE CONSIDERED SUBSIDIARY TO CONDUCTOR PAY ITEMS.

S08°11'48"E

PB-4
INSTALL QUAZITE PULL BOX
13+25.96
39.53' RT.

40' SINGLE ARM STANDARD POLE
LP-A2-3
13+03.71
35.80' RT.
SEE NOTE 1

40' SINGLE ARM STANDARD POLE
LP-A2-2
14+96.16
38.56' RT.
SEE NOTE 1

PB-2
INSTALL QUAZITE PULL BOX
15+32.08
37.82' RT.

S02°16'42"W

MATCHLINE STA. 17+00.00

PLAN NOTES:

1. CONTRACTOR TO STAKE POLE LOCATION AND POTHOLE ADJACENT UTILITIES THAT MAY BE IN CONFLICT TO MEET MIN. CLEARANCES. WHERE CLEARANCE ISSUES ARISE, CONTRACTOR TO WORK WITH ENGINEER TO RESOLVE THE CONFLICT.

2. CONTRACTOR TO COORDINATE CONNECTION CONNECTION TO SECONDARY POWER SUPPLY AND ENERGIZATION OF CIRCUIT(S) WITH INDEPENDENCE POWER AND LIGHT.

3. STATION AND OFFSET ARE APPROXIMATE. CONTRACTOR TO POSITION PROPOSED PULL BOX SUCH THAT IT WILL INTERCEPT THE EXISTING UNDERGROUND ELECTRIC LIGHTING CIRCUIT. SPLICE EXISTING CONDUCTORS WITH PROPOSED CONDUCTORS INSIDE PULL BOX. THIS WORK IS TO BE CONSIDERED SUBSIDIARY TO CONDUCTOR PAY ITEMS.

SCALE
0 20 40 60

LIGHTING PLAN
SHEET 1 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/6/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	130

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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DATE	DESCRIPTION	REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

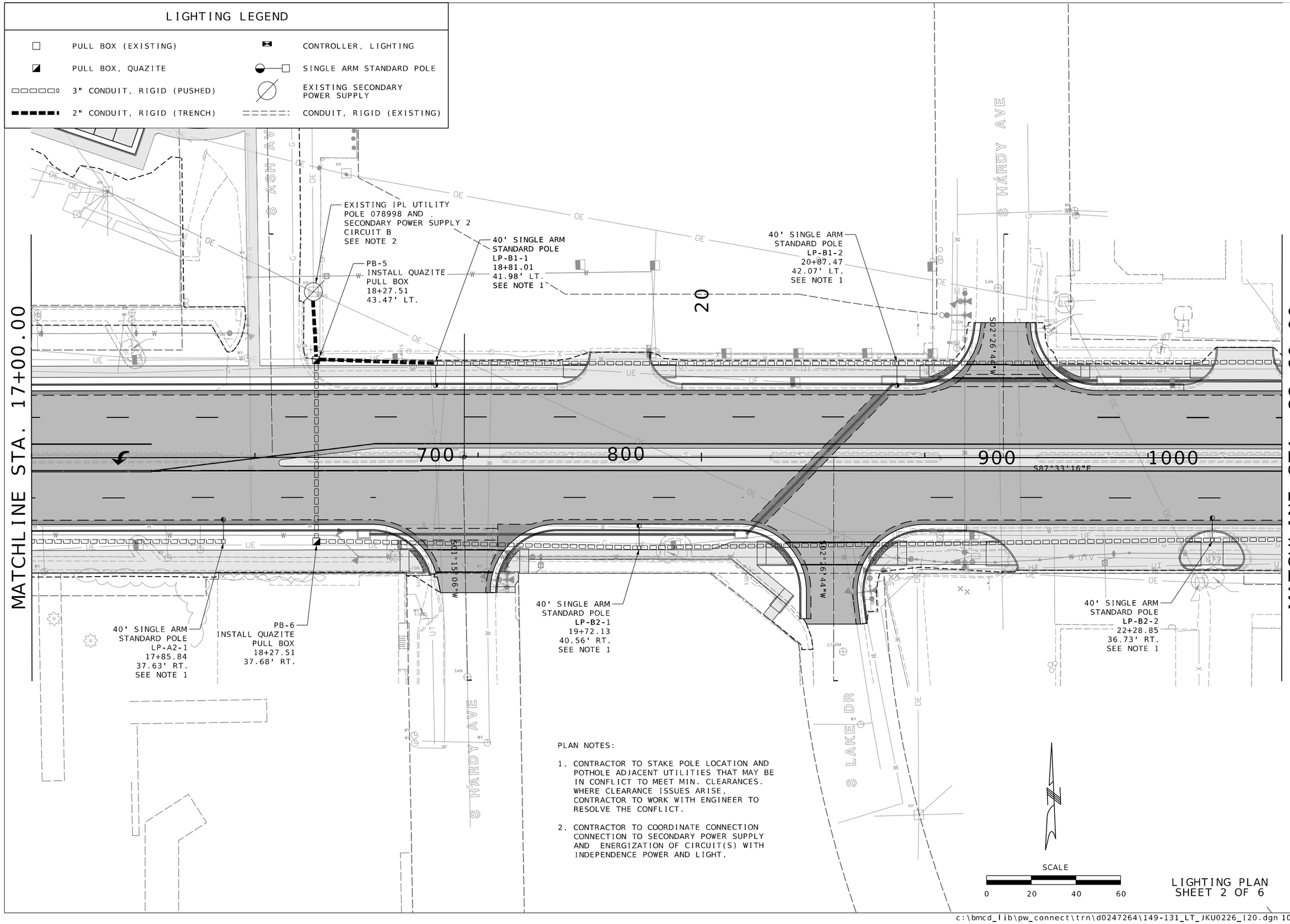
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

LIGHTING LEGEND

□	PULL BOX (EXISTING)	⊠	CONTROLLER, LIGHTING
◪	PULL BOX, QUAZITE	●—□	SINGLE ARM STANDARD POLE
□□□□□□	3" CONDUIT, RIGID (PUSHED)	⊘	EXISTING SECONDARY POWER SUPPLY
▬▬▬▬	2" CONDUIT, RIGID (TRENCH)	═══	CONDUIT, RIGID (EXISTING)



PLAN NOTES:

1. CONTRACTOR TO STAKE POLE LOCATION AND POTHOLE ADJACENT UTILITIES THAT MAY BE IN CONFLICT TO MEET MIN. CLEARANCES. WHERE CLEARANCE ISSUES ARISE, CONTRACTOR TO WORK WITH ENGINEER TO RESOLVE THE CONFLICT.
2. CONTRACTOR TO COORDINATE CONNECTION CONNECTION TO SECONDARY POWER SUPPLY AND ENERGIZATION OF CIRCUIT(S) WITH INDEPENDENCE POWER AND LIGHT.

SCALE
0 20 40 60

LIGHTING PLAN
SHEET 2 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED 8/6/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	131

COUNTY JACKSON
JOB NO. JKU0226
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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

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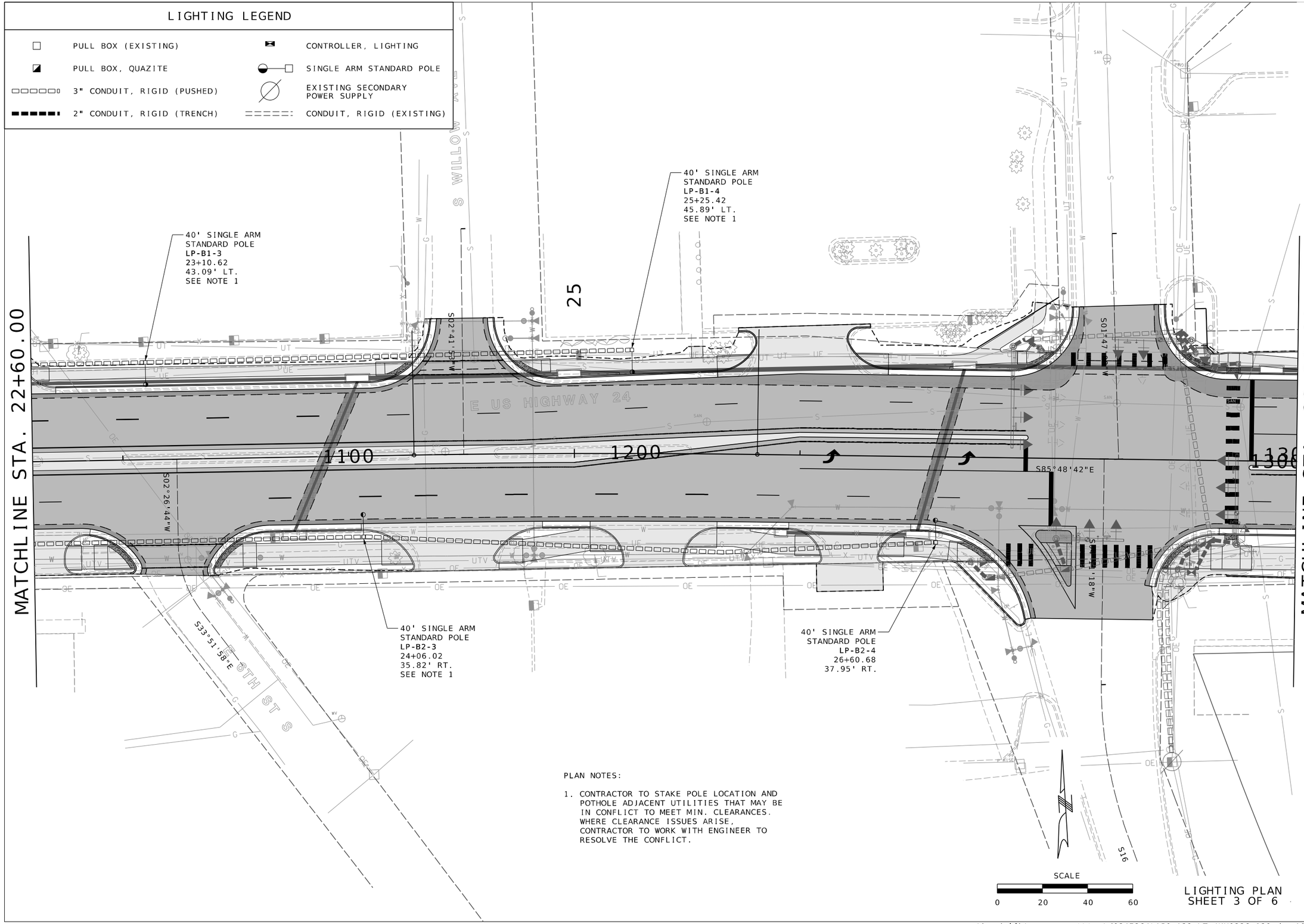
LIGHTING LEGEND

□	PULL BOX (EXISTING)	⊠	CONTROLLER, LIGHTING
◪	PULL BOX, QUAZITE	●—□	SINGLE ARM STANDARD POLE
□□□□□□	3" CONDUIT, RIGID (PUSHED)	⊘	EXISTING SECONDARY POWER SUPPLY
▬▬▬▬	2" CONDUIT, RIGID (TRENCH)	═══	CONDUIT, RIGID (EXISTING)



PLAN NOTES:

1. CONTRACTOR TO STAKE POLE LOCATION AND POTHOLE ADJACENT UTILITIES THAT MAY BE IN CONFLICT TO MEET MIN. CLEARANCES. WHERE CLEARANCE ISSUES ARISE, CONTRACTOR TO WORK WITH ENGINEER TO RESOLVE THE CONFLICT.

LIGHTING PLAN
SHEET 3 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/6/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	132

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

LIGHTING LEGEND

□	PULL BOX (EXISTING)	▪	CONTROLLER, LIGHTING
◪	PULL BOX, QUAZITE	●—□	SINGLE ARM STANDARD POLE
□□□□□□	3" CONDUIT, RIGID (PUSHED)	⊘	EXISTING SECONDARY POWER SUPPLY
▬▬▬▬	2" CONDUIT, RIGID (TRENCH)	═══	CONDUIT, RIGID (EXISTING)

MATCHLINE STA. 28+20.00

MATCHLINE STA. 33+80.00

40' SINGLE ARM STANDARD POLE
LP-C2-1
28+48.00
46.56' LT.
SEE NOTE 1

40' SINGLE ARM STANDARD POLE
LP-C2-5
30+40.96
41.29' LT.
SEE NOTE 1

40' SINGLE ARM STANDARD POLE
LP-C2-3
31+82.74
37.94' LT.

S87°35'35"E

EXISTING IPL UTILITY POLE 077252 AND SECONDARY POWER SUPPLY 3 CIRCUIT C
SEE NOTE 2

PB-7
INSTALL QUAZITE PULL BOX
28+52.84
36.41' RT.

40' SINGLE ARM STANDARD POLE
LP-C1-1
29+29.00
36.26' RT.
SEE NOTE 1

40' SINGLE ARM STANDARD POLE
LP-C1-2
30+65.93
35.45' RT.
SEE NOTE 1

40' SINGLE ARM STANDARD POLE
LP-C1-3
32+83.31
32.80' RT.
SEE NOTE 1

PLAN NOTES:

1. CONTRACTOR TO STAKE POLE LOCATION AND POTHOLE ADJACENT UTILITIES THAT MAY BE IN CONFLICT TO MEET MIN. CLEARANCES. WHERE CLEARANCE ISSUES ARISE, CONTRACTOR TO WORK WITH ENGINEER TO RESOLVE THE CONFLICT.

2. CONTRACTOR TO COORDINATE CONNECTION CONNECTION TO SECONDARY POWER SUPPLY AND ENERGIZATION OF CIRCUIT(S) WITH INDEPENDENCE POWER AND LIGHT.

SCALE
0 20 40 60

LIGHTING PLAN
SHEET 4 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
8/6/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	133

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
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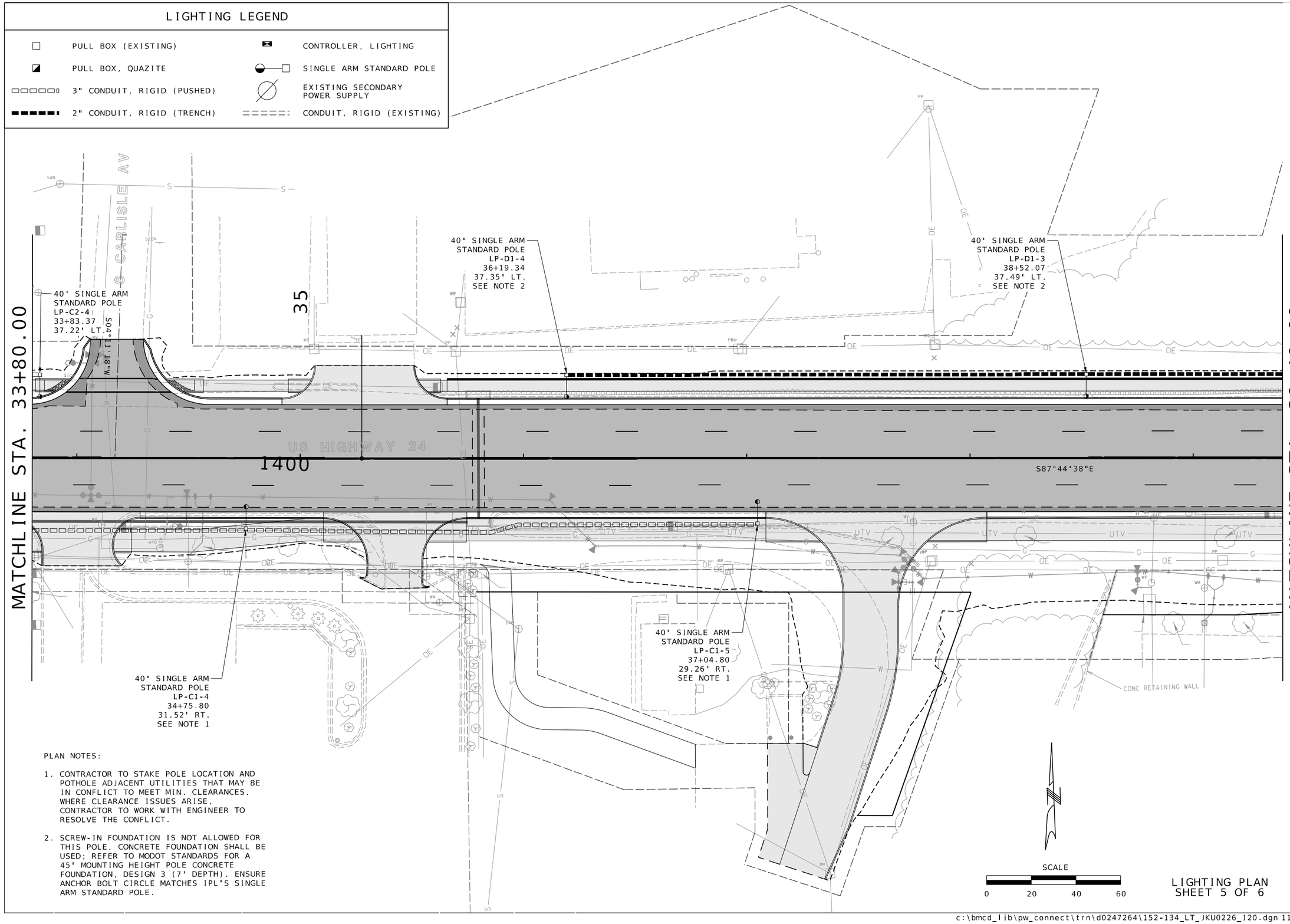
REV.

LIGHTING LEGEND

□	PULL BOX (EXISTING)	⊠	CONTROLLER, LIGHTING
◪	PULL BOX, QUAZITE	●—□	SINGLE ARM STANDARD POLE
□□□□□□	3" CONDUIT, RIGID (PUSHED)	⊘	EXISTING SECONDARY POWER SUPPLY
▬▬▬▬	2" CONDUIT, RIGID (TRENCH)	═══	CONDUIT, RIGID (EXISTING)



PLAN NOTES:

1. CONTRACTOR TO STAKE POLE LOCATION AND POTHOLE ADJACENT UTILITIES THAT MAY BE IN CONFLICT TO MEET MIN. CLEARANCES. WHERE CLEARANCE ISSUES ARISE, CONTRACTOR TO WORK WITH ENGINEER TO RESOLVE THE CONFLICT.

2. SCREW-IN FOUNDATION IS NOT ALLOWED FOR THIS POLE. CONCRETE FOUNDATION SHALL BE USED; REFER TO MODOT STANDARDS FOR A 45' MOUNTING HEIGHT POLE CONCRETE FOUNDATION, DESIGN 3 (7' DEPTH). ENSURE ANCHOR BOLT CIRCLE MATCHES IPL'S SINGLE ARM STANDARD POLE.

LIGHTING PLAN
SHEET 5 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	134

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

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DESCRIPTION	DATE

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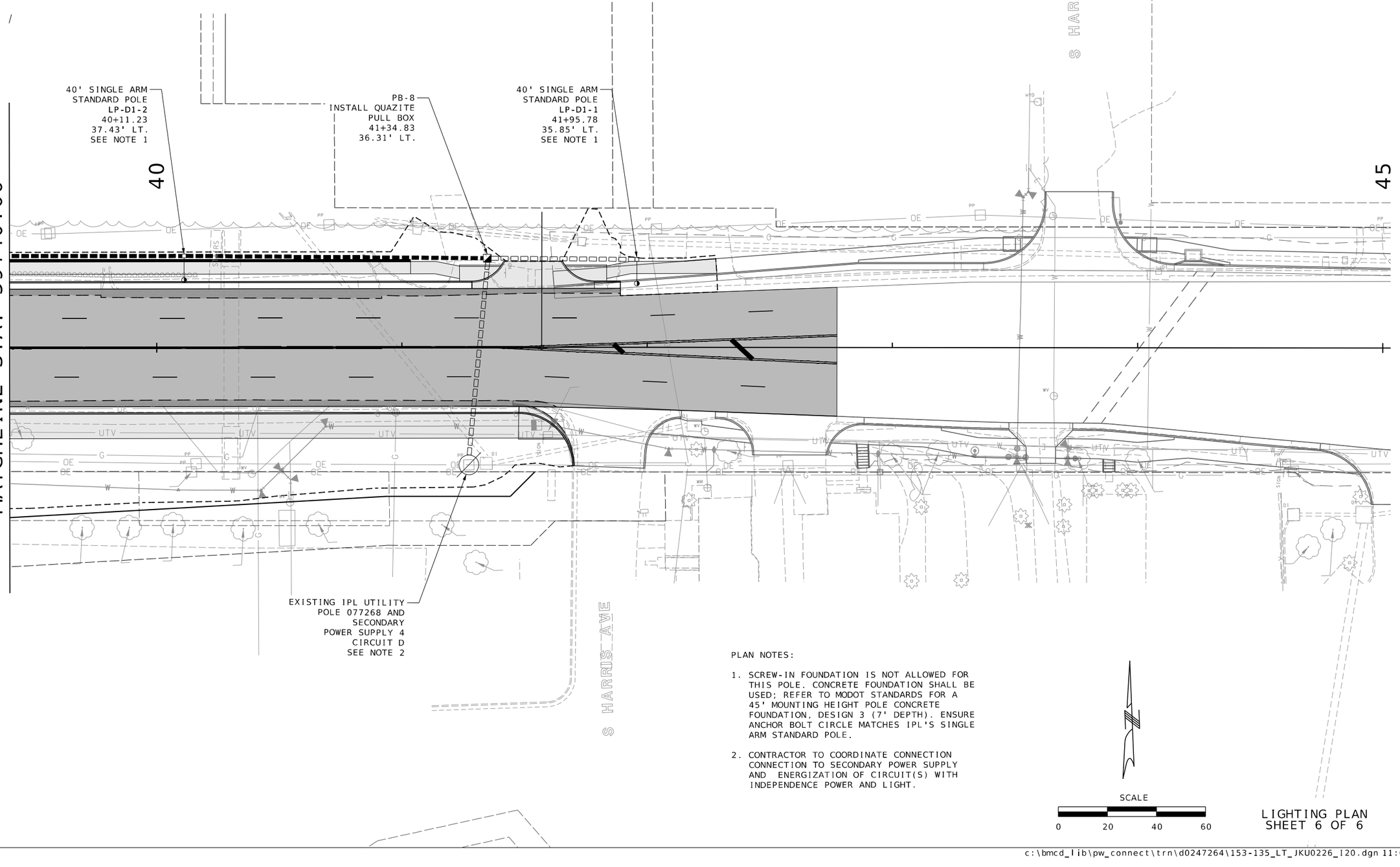
REV.

LIGHTING LEGEND

□	PULL BOX (EXISTING)	⊟	CONTROLLER, LIGHTING
◪	PULL BOX, QUAZITE	●—□	SINGLE ARM STANDARD POLE
□□□□□□	3" CONDUIT, RIGID (PUSHED)	⊘	EXISTING SECONDARY POWER SUPPLY
▬▬▬▬	2" CONDUIT, RIGID (TRENCH)	═══	CONDUIT, RIGID (EXISTING)



PLAN NOTES:

1. SCREW-IN FOUNDATION IS NOT ALLOWED FOR THIS POLE. CONCRETE FOUNDATION SHALL BE USED; REFER TO MODOT STANDARDS FOR A 45' MOUNTING HEIGHT POLE CONCRETE FOUNDATION, DESIGN 3 (7' DEPTH). ENSURE ANCHOR BOLT CIRCLE MATCHES IPL'S SINGLE ARM STANDARD POLE.

2. CONTRACTOR TO COORDINATE CONNECTION CONNECTION TO SECONDARY POWER SUPPLY AND ENERGIZATION OF CIRCUIT(S) WITH INDEPENDENCE POWER AND LIGHT.

SCALE
0 20 40 60

LIGHTING PLAN
SHEET 6 OF 6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	135

COUNTY
JACKSON

JOB NO.
JKU0226

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REV.

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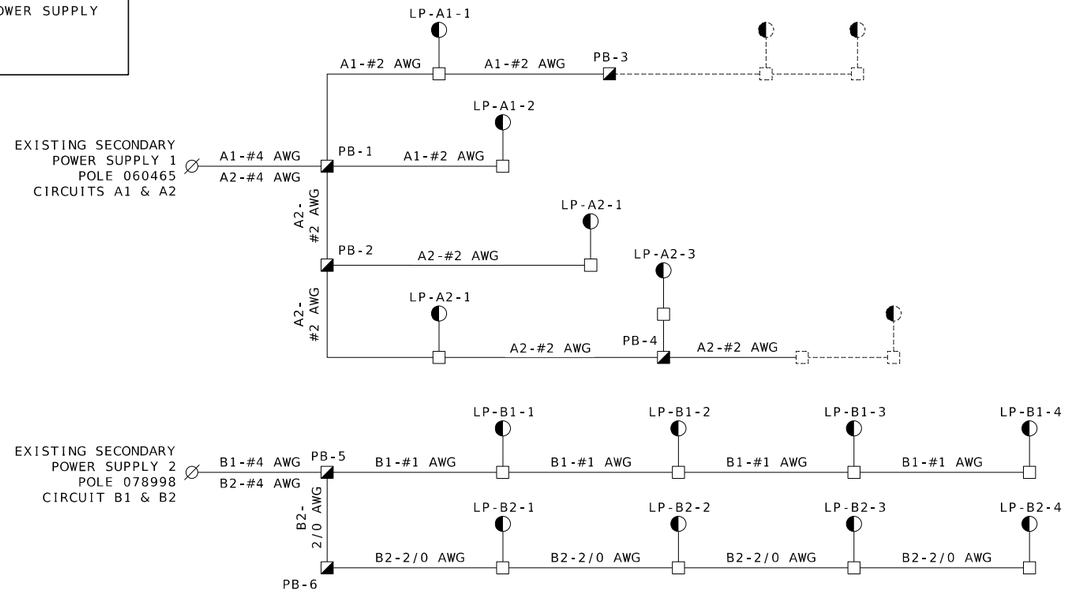
LIGHTING LEGEND

EXISTING PULL BOX	EXISTING SINGLE ARM STANDARD POLE
PROPOSED PULL BOX	PROPOSED SINGLE ARM STANDARD POLE
EXISTING CONDUIT	EXISTING SECONDARY POWER SUPPLY
PROPOSED CONDUIT	

NOTE:

TRIPLEX CONDUCTORS SHOWN IN THE PLANS ARE TO BE FURNISHED & INSTALLED BY INDEPENDENCE POWER & LIGHT.



SUMMARY OF CIRCUIT VOLTAGE DROPS

CIRCUIT	TOTAL % VOLTAGE DROP	AMPS	CKT. KVA	BRANCH CKT. BKR. POLE/AMPS	TRIPLEX WIRE (AWG) SIZE
A1	4.09%	7.8	0.94	1P/20	VARIES , SEE WIRING DIAGRAM
A2	4.85%	7.8	0.94	1P/20	VARIES , SEE WIRING DIAGRAM
B1	4.29%	7.8	0.94	1P/20	VARIES , SEE WIRING DIAGRAM
B2	4.44%	7.8	0.94	1P/20	VARIES , SEE WIRING DIAGRAM
C1	4.64%	9.75	1.17	1P/20	VARIES , SEE WIRING DIAGRAM
C2	4.96%	7.8	0.94	1P/20	VARIES , SEE WIRING DIAGRAM
D	4.76%	7.8	0.94	1P/20	VARIES , SEE WIRING DIAGRAM

WIRING DIAGRAM
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED 8/6/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	136

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE | REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

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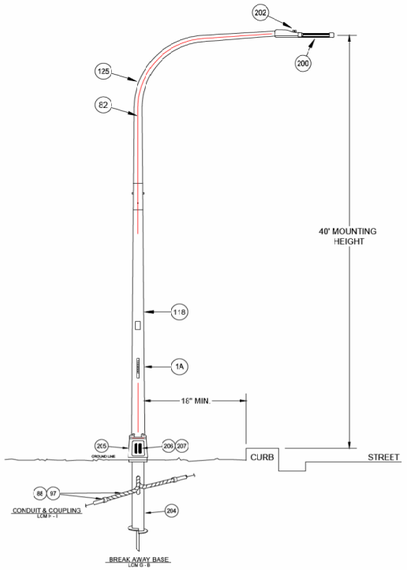


REV.	DATE	DESCRIPTION	BY	APPD.	SCALE
1	08/01/23	ADDED NEW IPL BORDER	RMC	JAK	NTS

DRAWN BY: KPEL
DATE: 06/15/17
DW NAME: LCS40.DWG

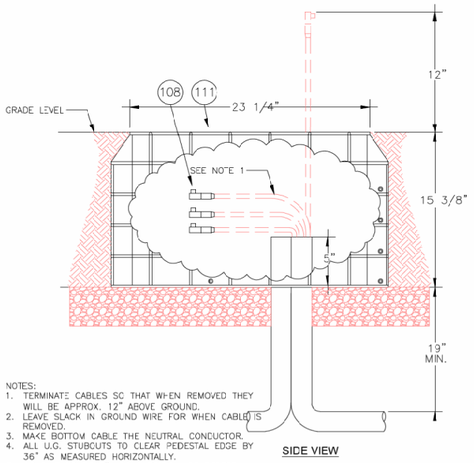
CITY OF INDEPENDENCE
POWER & LIGHT DEPARTMENT
40' SINGLE ARM
CONTEMPORARY STREET LIGHT

DRAWING NO.	STD NO.	HEIGHT	CLASS	SHEET NO.	REV.
LCS40	22			1 OF 2	1

LUMINAIRE / LAMP OPTION			BASE ASSEMBLY
35, 55, 160, 270			LCS40
MATERIAL			
STOCK NO.	ITEM	Q'TY	DESCRIPTION	ASSEMBLY OPTIONS
25-004-02	62	50	600V #12-2 S CONDUCTOR SOLID CU	LCS40_*
41-018-25	68	10	2" NON - METALLIC FLEX CONDUIT	
41-020-20	97	2	2" PVC SCH 40 COUPLING	
30-350-35	1A	1	LARGE POLE TAG	
05-040-10	118	1	40' ALUMINUM STREET LIGHT POLE	
62-034-68	125	1	8' DAVIT ARM	
63-000-01	202	1	PHOTO CELL	
65-010-10	204	1	7" SCREW IN BASE	
65-020-65	205	1	BREAKAWAY BASE	
33-027-15	206	1	500V TIME DELAY FUSE	
33-028-30	207	1	30 AMP FUSE HOLDER	
6C-***-**	200	1	SEE BELOW LUMINAIRE OPTIONS	LCS4C_35,55,160,270

LUMINAIRE OPTIONS				
~~60-900-35~~	~~200~~	~~1~~	~~35W LED LUMINAIRE STREET LIGHT~~	~~LCS43_35~~
~~60-900-55~~	~~200~~	~~1~~	~~55W LED LUMINAIRE STREET LIGHT~~	~~LCS43_55~~
~~60-901-60~~	~~200~~	~~1~~	~~160W LED LUMINAIRE STREET LIGHT~~	~~LCS40_16C~~
60-902-70	200	1	270W LED LUMINAIRE STREET LIGHT	LCS40_27C

EXAMPLE LCS40_270 40' SINGLE ARM CONTEMPORARY STREET LIGHT WITH A PHOTO CELL; 8'ARM 270W LED LUMINARIE



NOTES:
1. TERMINATE CABLES SO THAT WHEN REMOVED THEY WILL BE APPROX. 12" ABOVE GROUND.
2. LEAVE SLACK IN GROUND WIRE FOR WHEN CABLE IS REMOVED.
3. MAKE BOTTOM CABLE THE NEUTRAL CONDUCTOR.
4. ALL U/G. STUBCUTS TO CLEAR PEDESTAL EDGE BY 36" AS MEASURED HORIZONTALLY.
5. CONDUIT TO BE 5" ABOVE BOTTOM OF PEDESTAL AND BE PERPENDICULAR TO BASE OF PEDESTAL, OR AS DIRECTED BY IPL REPRESENTATIVE.
6. TRENCHING WILL BE DEEPER AT PEDESTAL LOCATION TO ACHIEVE PROPER HEIGHT OF CONDUIT IN PEDESTAL.

SIDE VIEW

REV.	DATE	DESCRIPTION	BY	APPD.	SCALE
1	08/01/23	DESCRIPTION	JAK	MSK	NTS

DRAWN BY: KPEL
DATE: 06/29/18
DW NAME: USLSP.DWG

CITY OF INDEPENDENCE
POWER & LIGHT DEPARTMENT
LOAD SUPPORTING SECONDARY
BELOW GRADE PEDESTAL

DRAWING NO.	STD NO.	HEIGHT	CLASS	SHEET NO.	REV.
USLSP	9			1 OF 2	1

MATERIAL				
ITEM	QTY	STOCK NO.	DESCRIPTION	ASSEMBLY OPT
108	3	4C-036-**	SEE BELOW ASSEMBLY OPTIONS	
111	1	42-250-40	BELOW GRADE COMPOSITE SECONDARY PEDESTAL	

MATERIAL				
ITEM	QTY	STOCK NO.	DESCRIPTION	ASSEMBLY OPT
108	3	40-036-04	LOAD BEARING BELOW GRADE SEC PEDESTAL 4 TERM BUS KIT	USLSP_4
108	3	40-036-06	LOAD BEARING BELOW GRADE SEC PEDESTAL 6 TERM BUS KIT	USLSP_6

REV.	DATE	DESCRIPTION	BY	APPD.	SCALE
1	08/01/23	DESCRIPTION	JAK	MSK	NTS

DRAWN BY: KPEL
DATE: 06/29/18
DW NAME: USLSP.DWG

CITY OF INDEPENDENCE
POWER & LIGHT DEPARTMENT
LOAD SUPPORTING SECONDARY
BELOW GRADE PEDESTAL

DRAWING NO.	STD NO.	HEIGHT	CLASS	SHEET NO.	REV.
USLSP				2 OF 2	1

LIGHTING DETAIL
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/6/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	137

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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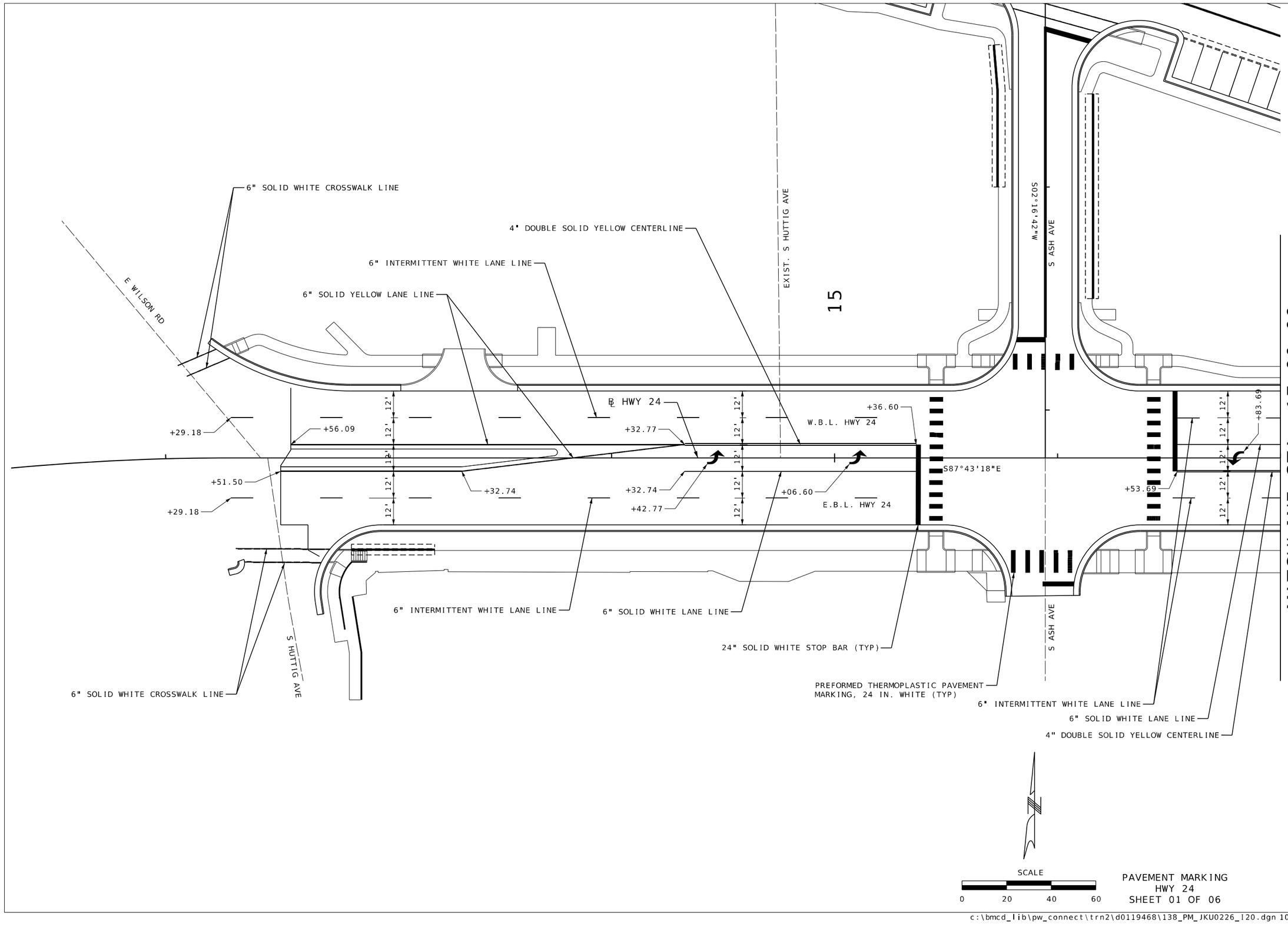

PAVEMENT MARKING
HWY 24
SHEET 01 OF 06

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	138

COUNTY
JACKSON

JOB NO.
JKU0226

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JEFFERSON CITY, MO 65102
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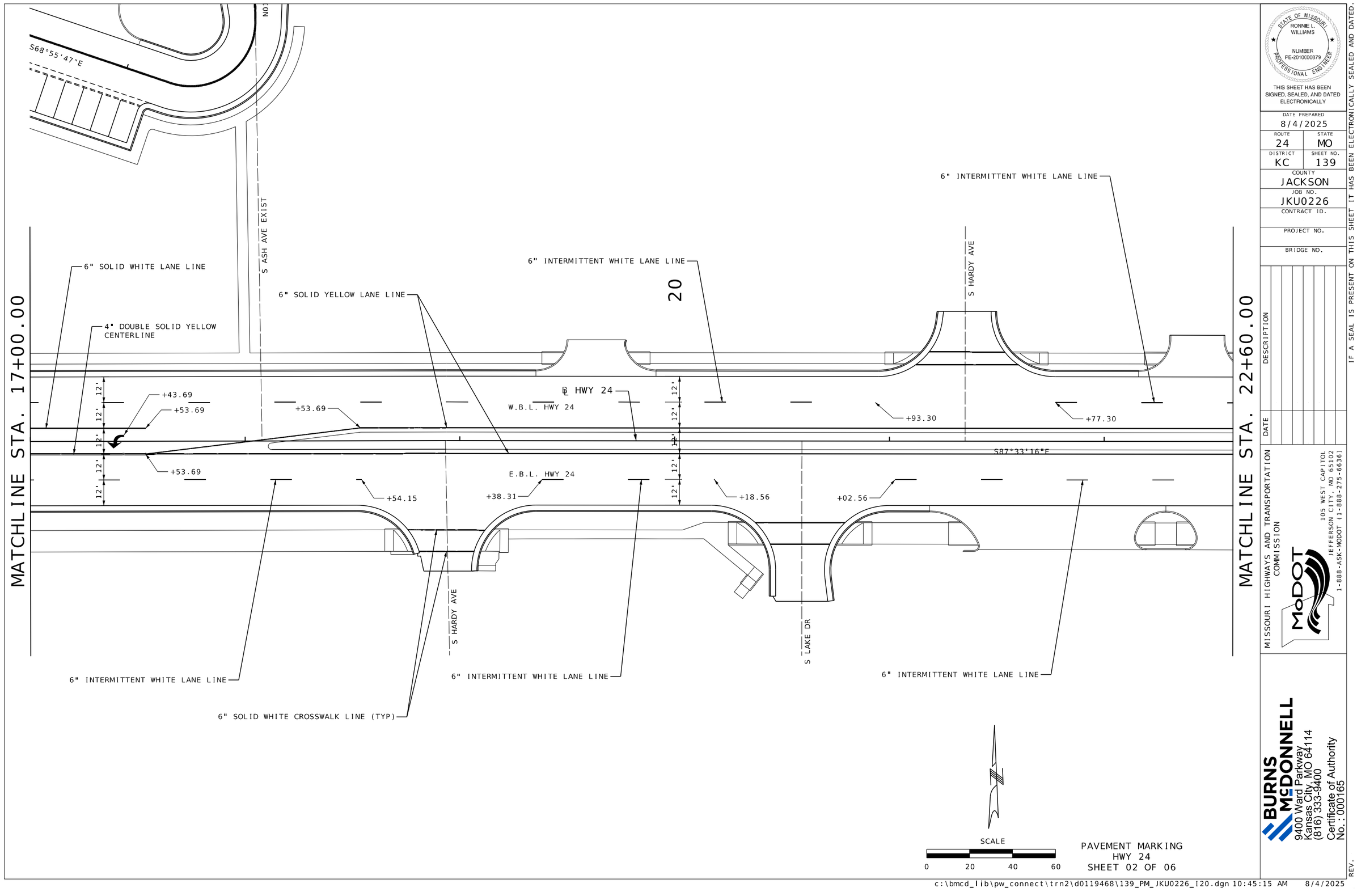

SCALE

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PAVEMENT MARKING
HWY 24
SHEET 02 OF 06

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	139

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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No.: 000165

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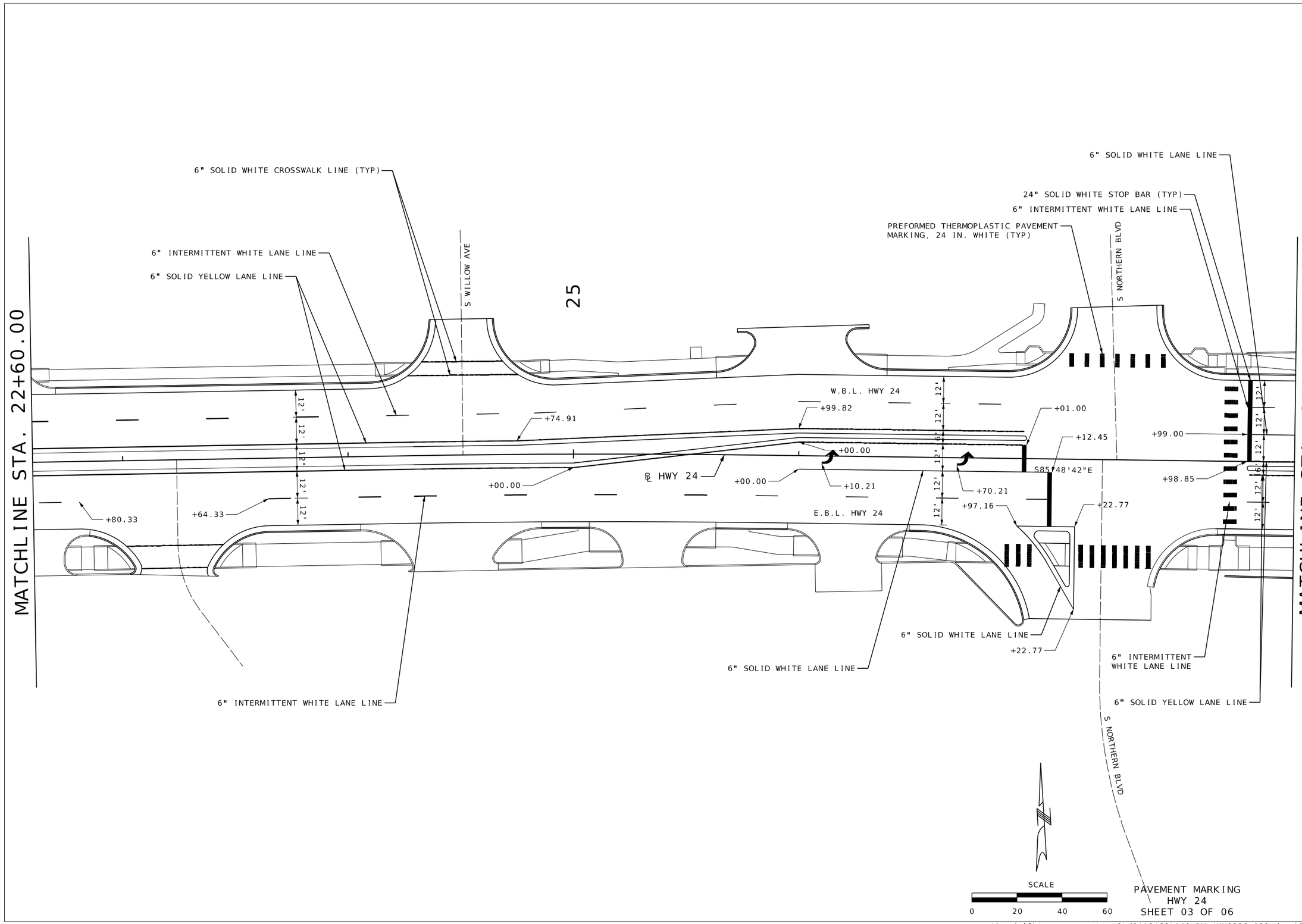

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	140

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
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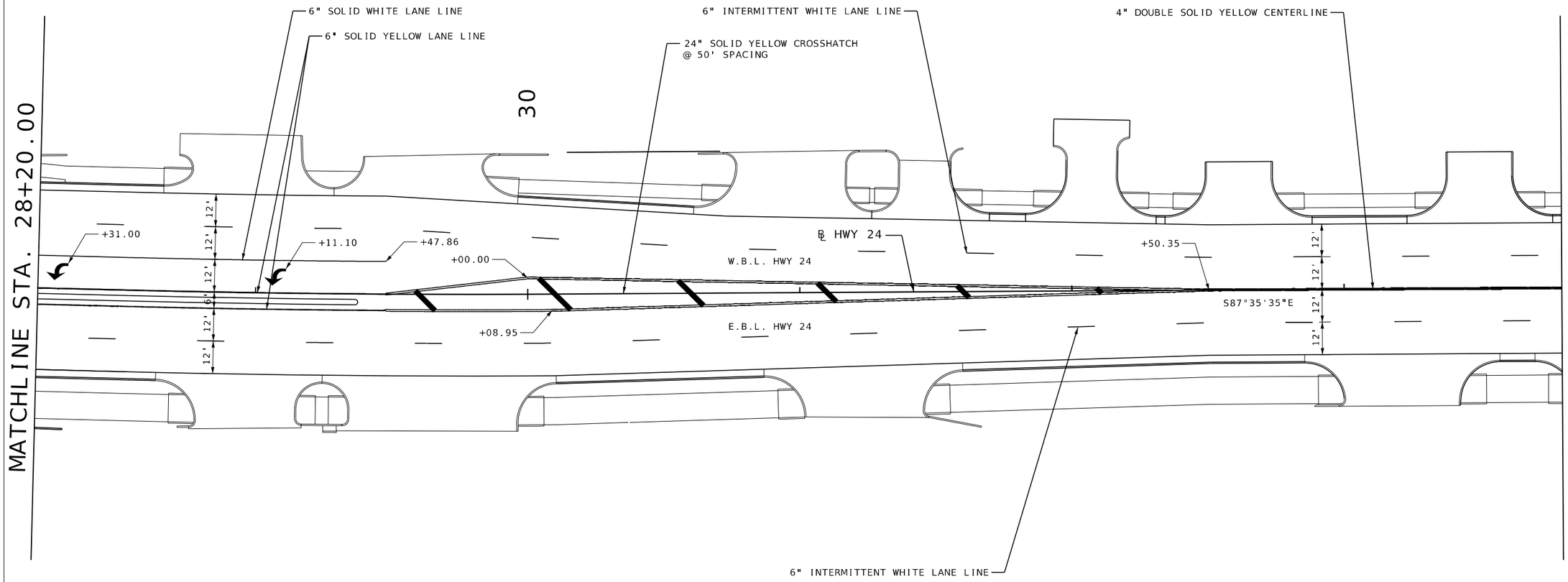

SCALE

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PAVEMENT MARKING
HWY 24
SHEET 04 OF 06

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	141

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
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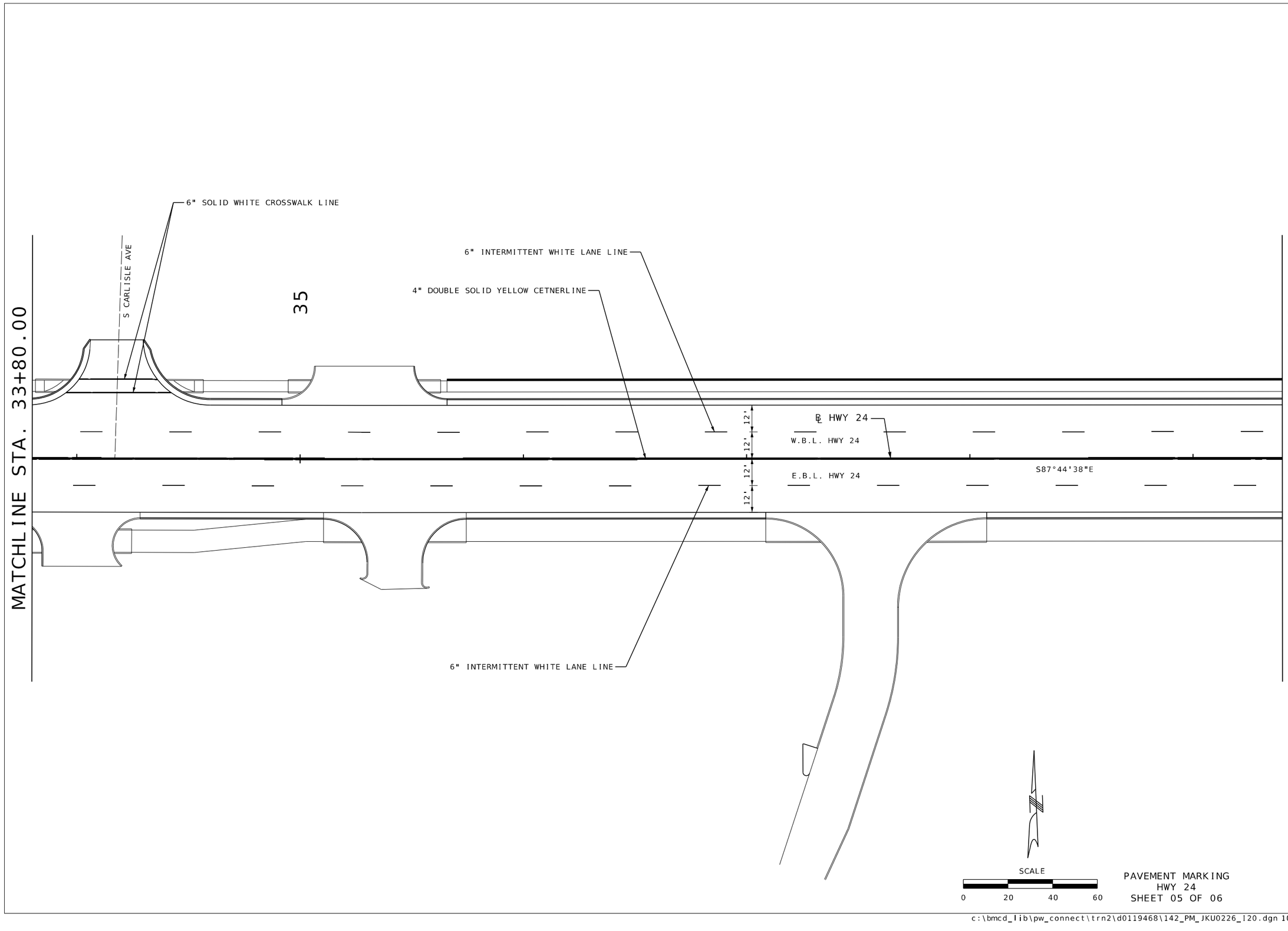

PAVEMENT MARKING
HWY 24
SHEET 05 OF 06

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	142

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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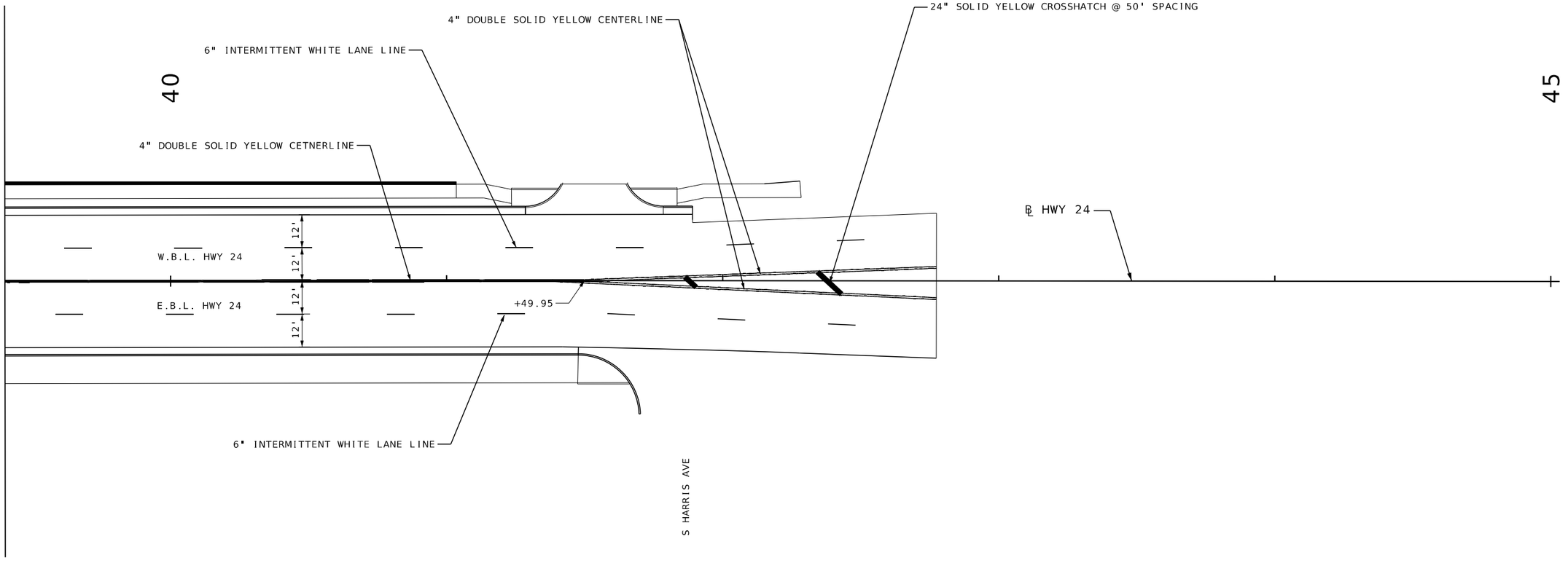

SCALE

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PAVEMENT MARKING
HWY 24
SHEET 06 OF 06

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

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DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	143

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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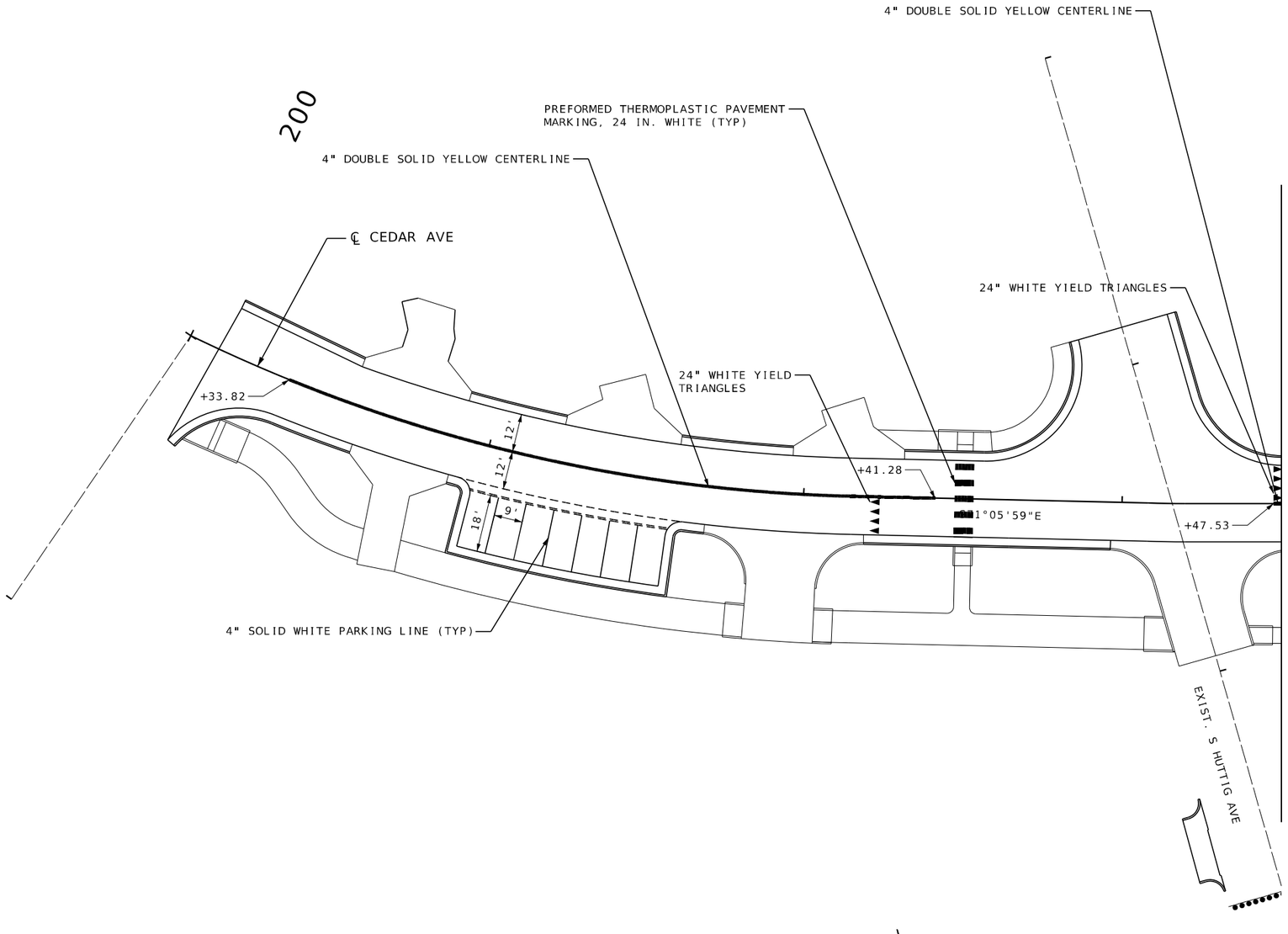

SCALE

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PAVEMENT MARKING
CEDAR AVE
SHEET 01 OF 02

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED	8/4/2025
ROUTE	24
STATE	MO
DISTRICT	KC
SHEET NO.	144
COUNTY	JACKSON
JOB NO.	JKU0226
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
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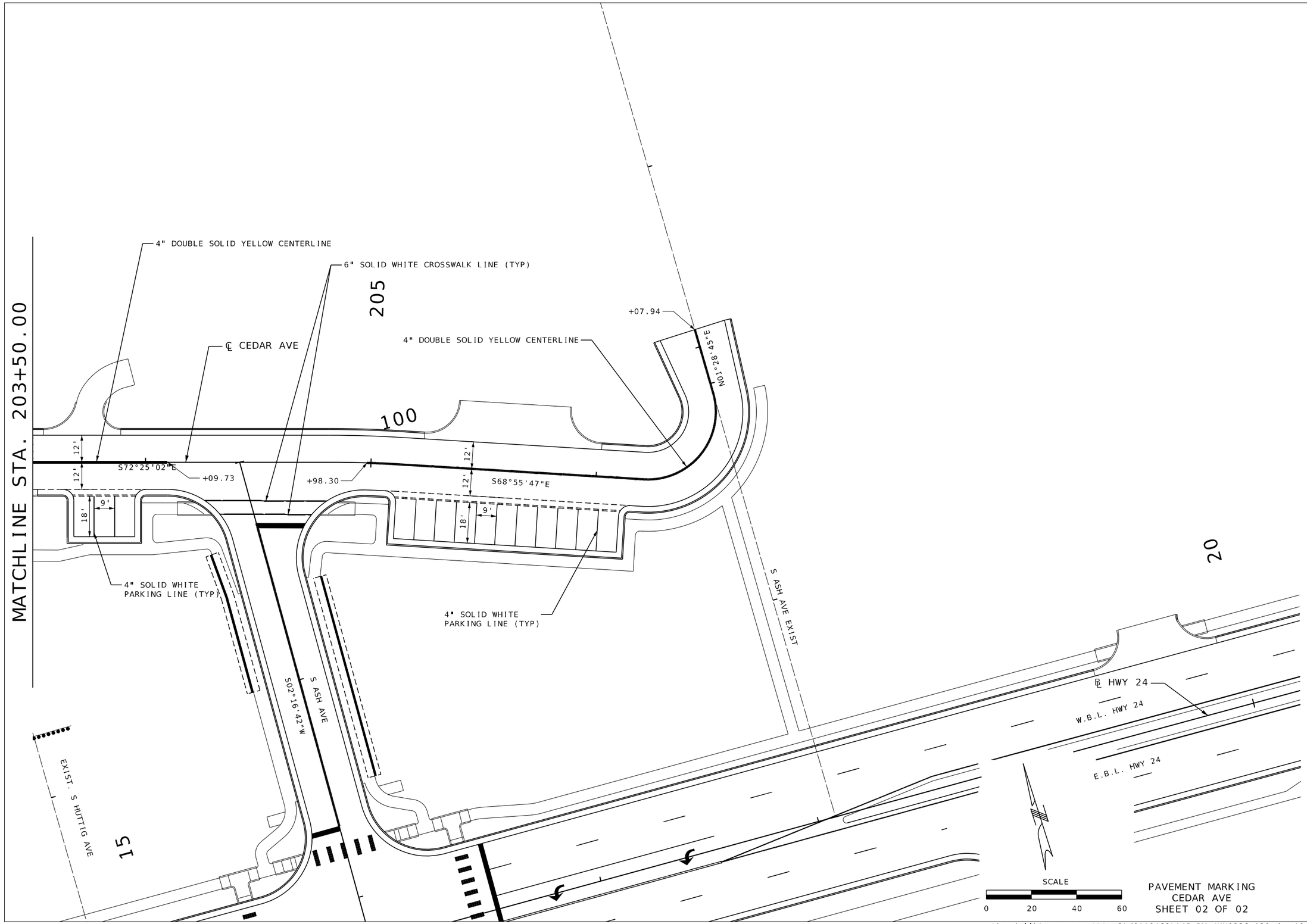

PAVEMENT MARKING
CEDAR AVE
SHEET 02 OF 02

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	145

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

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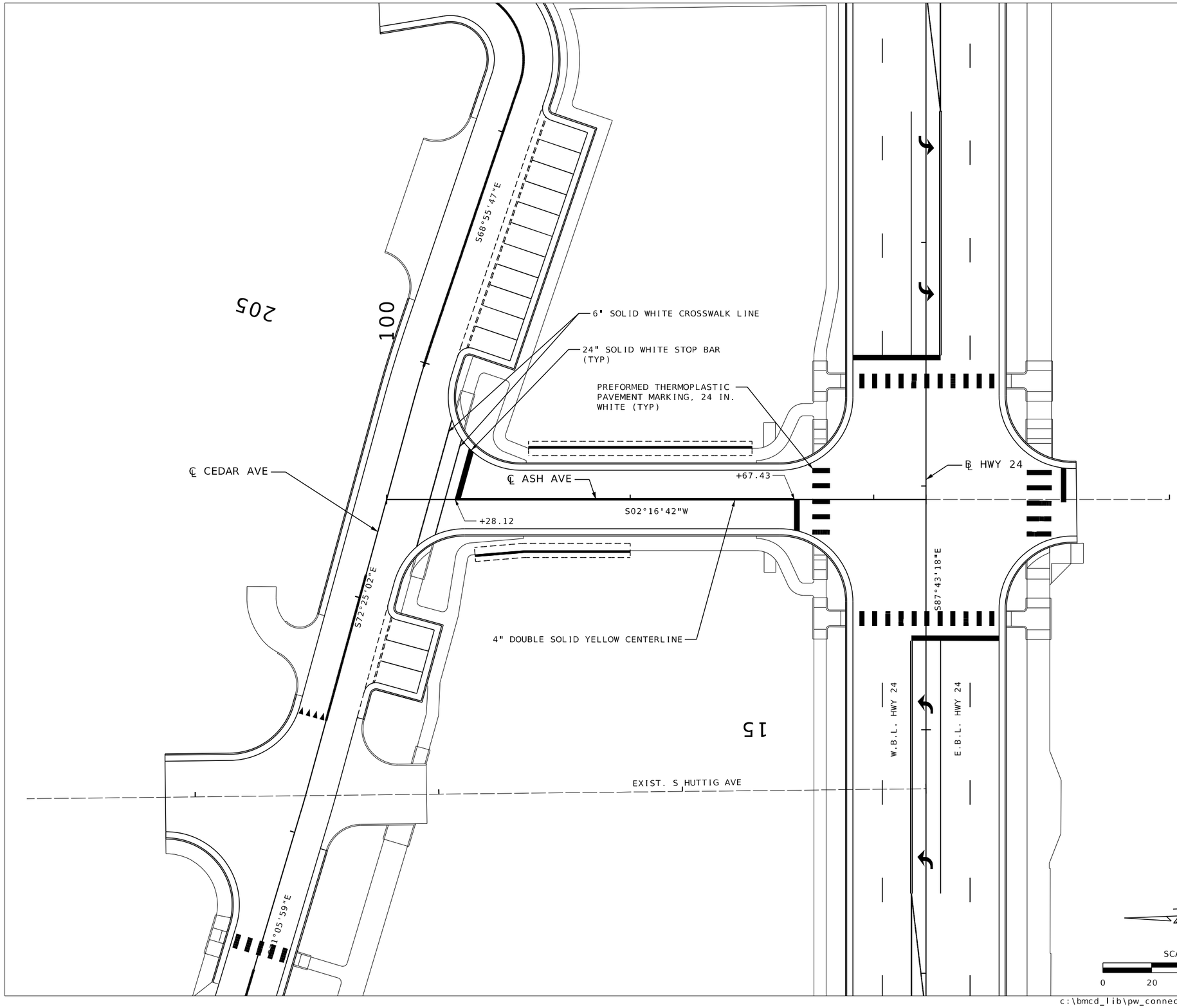

PAVEMENT MARKING
ASH AVE
SHEET 01 OF 01

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

"THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY"

DATE PREPARED: 8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	146

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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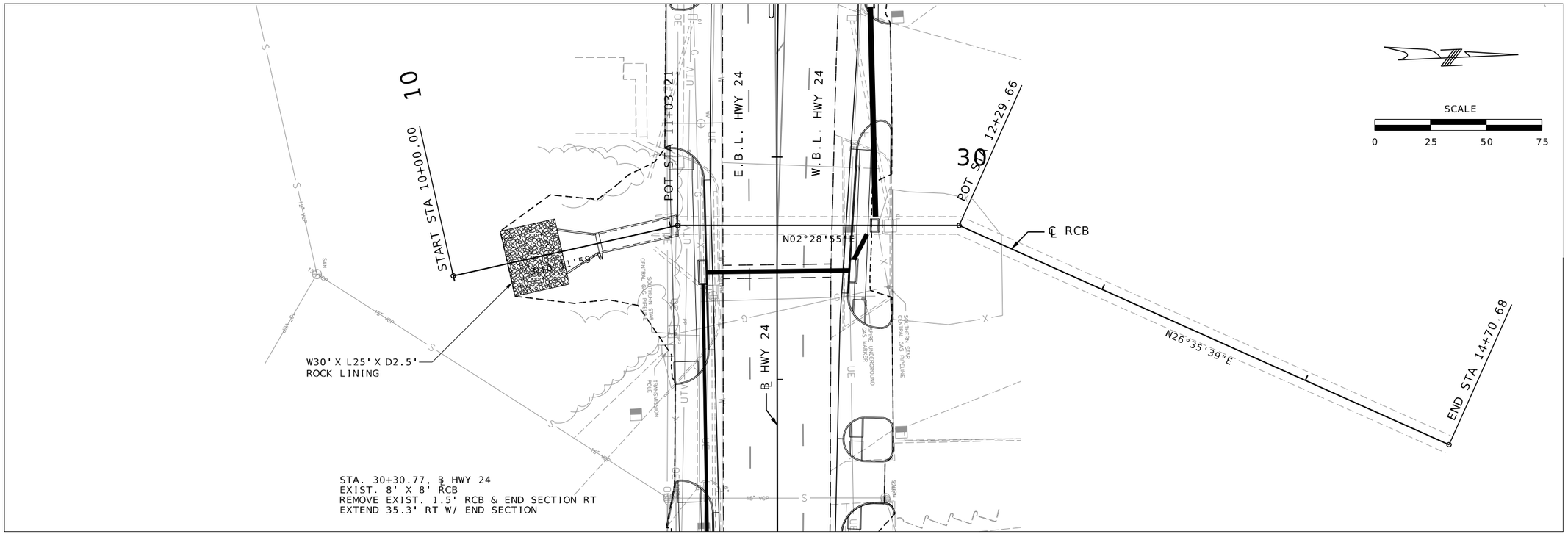

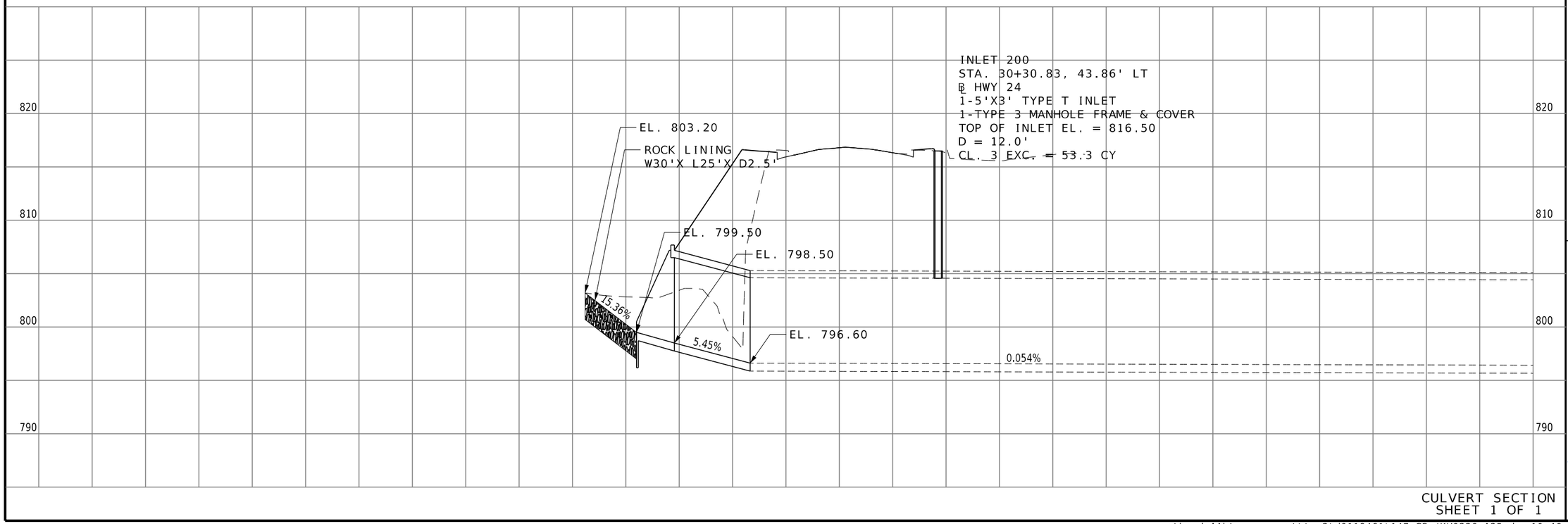

CULVERT SECTION
SHEET 1 OF 1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
8/4/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	147

COUNTY
JACKSON

JOB NO.
JKU0226

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

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REV.

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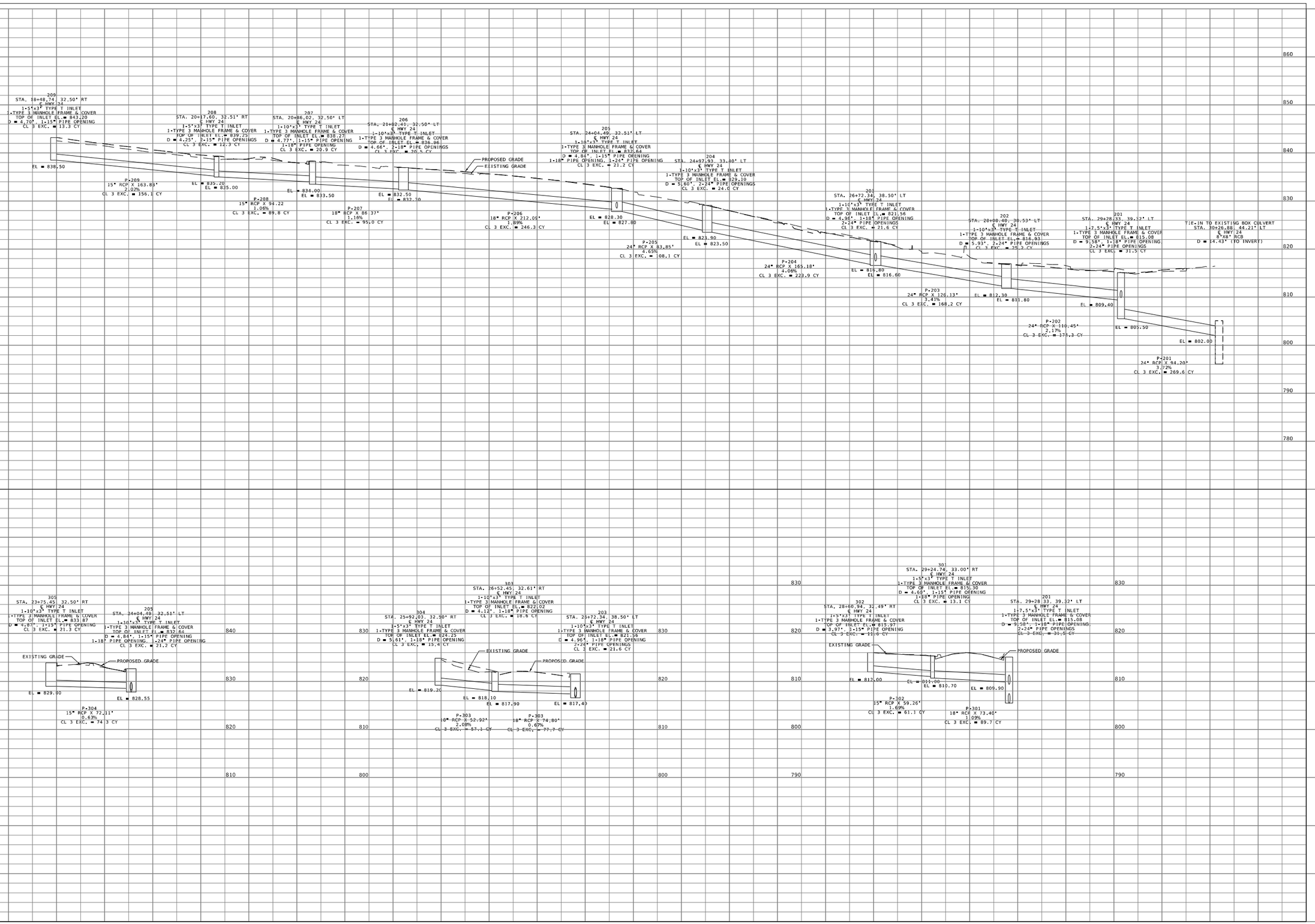

STATE OF MISSOURI
JAMES MICHAEL ALEXANDER
NUMBER 2009018690
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE
7/29/2025

DATE PREPARED
7/28/2025

ROUTE	STATE
24	MO

DISTRICT	SHEET NO.
KC	148

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

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IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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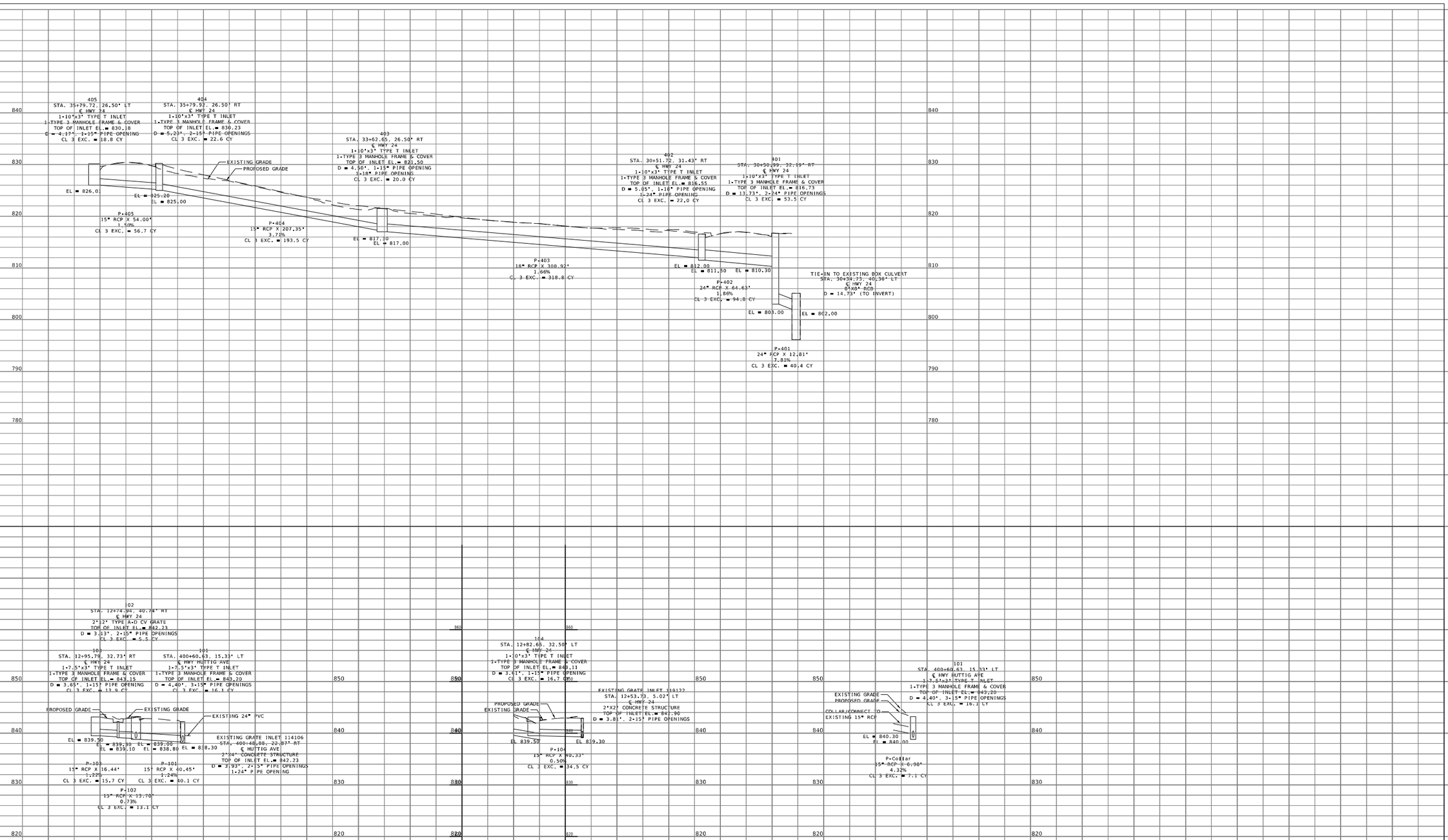
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

7733 N WALLACE AVE
KANSAS CITY, MO 64158
816-918-1114

CERTIFICATE/LICENSE
NO. 2010005873



IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

STATE OF MISSOURI
JAMES MICHAEL ALEXANDER
NUMBER 2006018480
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SEALED AND DATED ELECTRONICALLY.

DATE
7/29/2025

DATE PREPARED
7/28/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	149

COUNTY
JACKSON

JOB NO.
JKU0226

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)

7733 N WALLACE AVE
KANSAS CITY, MO 64158
816-918-1114
CERTIFICATE/LICENSE NO. 2010005873

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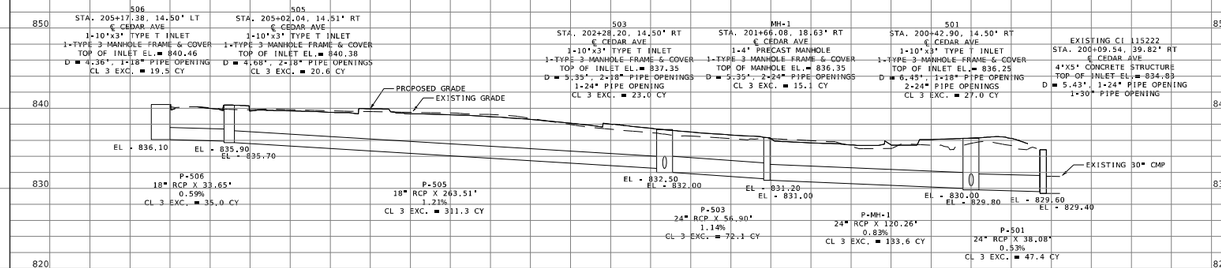
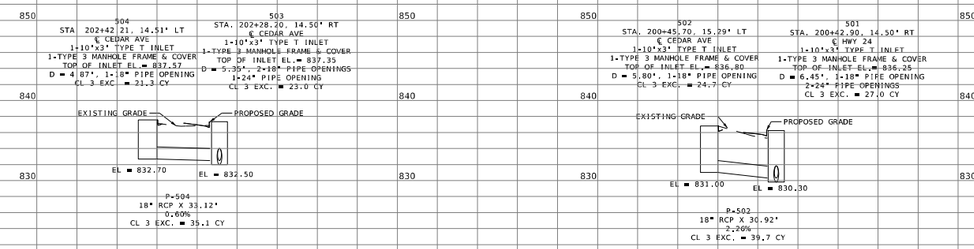




JAMES MICHAEL ALEXANDER
NUMBER 2009018680
STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEER
THIS SHEET WAS SIGNED AND DATED ELECTRONICALLY.

DATE
7/29/2025

DATE PREPARED
7/28/2025

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	150

COUNTY
JACKSON

JOB NO.
JKU0226

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

7733 N WALLACE AVE
KANSAS CITY, MO 64158
816-918-1114

CERTIFICATE/LICENSE NO. 2010005873

REV.

WATER NOTES:

1. MATERIALS AND CONSTRUCTION SHALL CONFORM WITH THE CITY OF INDEPENDENCE, MISSOURI WATER DEPARTMENT STANDARDS FOR WATER MAIN INSTALLATION.
2. ALL PIPES SHALL BE LAID TO A COVER A DEPTH OF AT LEAST 42 INCHES, BUT NO MORE THAN 60 INCHES BELOW PROPOSED FINISHED GRADE UNLESS APPROVED BY THE CITY OF INDEPENDENCE MUNICIPAL SERVICES ENGINEERING DEPARTMENT.
3. ALL PIPES, FITTINGS, FIRE HYDRANT LEADS, AND VALVES SHALL HAVE POLYETHYLENE ENCASEMENTS PROVIDED AND INSTALLED IN ACCORDANCE WITH AWWA STANDARDS.
4. THE CONTRACTOR TO LAY THE NEW MAIN WITHIN 3 FEET OF THE TIE-IN LOCATION TO THE EXISTING MAIN. THE CONTRACTOR SHALL CONTACT THE INDEPENDENCE WATER DEPARTMENT A MINIMUM OF 96 HOURS IN ADVANCE FOR FINAL CONNECTION (SEE CONNECTION DETAILS ON SHEET 164 - 167). EXISTING VALVES AND OTHER APPURTENANCES TO BE OPERATED BY AUTHORIZED PERSONNEL ONLY.
5. ALL PIPES AND FITTINGS TO BE PUSH-ON DUCTILE IRON. 6 INCH, 8 INCH, AND 12 INCH DIAMETER PIPE TO BE CLASS 52.
6. ALL PIPE BENDS AND FITTINGS SHALL HAVE FIELD-LOK GASKETS AS REQUIRED (SEE DETAILS CD-8, CD-9, AND CD-10 ON SHEET 170).
7. THE CENTERLINE OF THE WATER MAIN MUST BE STAKED WITH CUT STAKES EVERY 100' BY THE CONTRACTOR BEFORE CONSTRUCTION MAY BEGIN.
8. THE CONTRACTOR IS RESPONSIBLE FOR VERTICAL AND HORIZONTAL ALIGNMENT WITH THE EXISTING MAIN.
9. ALL INSPECTION OF WATER MAIN INSTALLATION SHALL BE PREFORMED BY THE CITY OF INDEPENDENCE WATER DEPARTMENT.
10. NO EXISTING UTILITIES HAVE BEEN LOCATED BY THE INDEPENDENCE WATER DEPARTMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
11. 10 FEET SEPARATION FROM ALL SANITARY AND STORM SEWER LINES AND STRUCTURES IS TO BE MAINTAINED AT ALL POINTS ALONG THE PROPOSED WATER MAIN. UNLESS OTHERWISE APPROVED BY THE CITY OF INDEPENDENCE MUNICIPAL SERVICES ENGINEERING DEPARTMENT.
12. SIZE AND LOCATION OF PROPOSED WATER MAIN AND APPURTENANCES IS TO BE PROVIDED BY THE INDEPENDENCE WATER DEPARTMENT.
13. ALL WATER MAIN CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE PUBLIC WORKS MANUAL OF THE CITY OF INDEPENDENCE.
14. THE CONTRACTOR IS RESPONSIBLE FOR PRESSURE TESTING OF THE WATER MAIN AFTER INSTALLATION. COORDINATE WITH ON-SITE INSPECTOR PRIOR TO STARTING THE TESTING.
15. THE CONTRACTOR SHALL PROVIDE THE AMOUNT OF HTH REQUIRED TO BRING THE CONCENTRATION OF THE SOLUTION IN THE WATER MAIN UP TO 50 PPM. METHOD OF DISINFECTION OF MAIN IS UP THE CONTRACTOR AND MAY BE ACCOMPLISHED BY LOOSE GRANULES PLACED IN EMPTY PIPE DURING INSTALLATION OR BY INJECTION OF PREMIXED SOLUTION DURING FILLING. CITY PERSONNEL WILL PERFORM THE FLUSHING AND BACTERIOLOGICAL TESTING.
16. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT FIRE HYDRANTS ARE NOT INSTALLED IN DRIVEWAYS AND/OR SIDEWALKS, AND THAT THE PUMPER NOZZLE FACES THE STREET.
17. THE ENGINEERING COMPANY SHALL PROVIDE ALL EASEMENT DESCRIPTIONS TO THE WATER DEPARTMENT. ALL REQUIRED EASEMENTS MUST BE GRANTED TO THE WATER DEPARTMENT PRIOR TO THE BEGINNING OF ANY WATER MAIN CONSTRUCTION.
18. ALL NEW FIRE HYDRANTS INSTALLED BY THE CONTRACTOR SHALL BE ORANGE WITH BLACK NOZZLE CAPS WITH THE FOLLOWING COATINGS: BENJAMIN MOORE & CO. INDUSTRIAL PAINT. COATING, ORANGE-M22-65, BLACK-M22-82.
19. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL FIRE HYDRANTS AND VALVE BOXES FROM THE OLD MAIN AND MAKING ALL NECESSARY REPAIRS ONCE THE NEW MAIN HAS BEEN PUT INTO SERVICE BY THE INDEPENDENCE WATER DEPARTMENT.
20. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL CURB VALVES AND METER WELLS FROM EXISTING SERVICE LINES, AFTER THE SERVICE LINES HAVE BEEN CHANGED TO THE NEW WATER MAIN.
21. THE PROPOSED WATER MAIN SHALL BE ENCASED PER CD-18 WHEN INSTALLED UNDER AN EXISTING SEWER.

APPROVED:

_____ _____
DATE CITY OF INDEPENDENCE WATER DEPARTMENT

APPROVED:

_____ _____
DATE CITY OF INDEPENDENCE FIRE DEPARTMENT

LEGEND

	BLOWOFF ASSEMBLY
WV	GATE VALVE (PROPOSED)
	VALVE (EXISTING)
	FIRE HYDRANT (EXISTING)
S	SANITARY SEWER MANHOLE (EXISTING)
D	STORM SEWER MANHOLE (EXISTING)
	PLUG
	FIRE HYDRANT ASSEMBLY
	THRUST BLOCK
	TREE
M	WATER METER (EXISTING)
M	WATER METER (PROPOSED)
	EXISTING FIRE HYDRANT ASSEMBLY REMOVAL
	SOLID SLEEVE
	REDUCER
X	FENCE (EXISTING)
FO	FIBER OPTIC (EXISTING)
G	GAS LINE (EXISTING)
OHP	OVERHEAD UTILITY POWER (EXISTING)
PL	PROPERTY LINE
TCE	TEMPORARY CONSTRUCTION EASEMENT
R/W	RIGHT-OF-WAY LINE (EXISTING)
ROW	RIGHT-OF-WAY LINE (PROPOSED)
SS	SANITARY SEWER (EXISTING)
ST	STORM SEWER (EXISTING)
	TREE LINE
UE	UNDERGROUND ELECTRICAL (EXISTING)
T	UNDERGROUND TELEPHONE LINE (EXISTING)
W	WATER MAIN (EXISTING)
	WATER MAIN (PROPOSED)
W/S	WATER SERVICE (EXISTING)
WS	WATER SERVICE (PROPOSED)

NOTES:

1. SEE DRAWING 1 FOR ROADWAY LEGEND.

ABBREVIATION LIST

AVE	AVENUE
BLVD	BOULEVARD
BM	BENCHMARK
BOL	BEGINNING OF LINE
CF	CUBIC FEET
CI	CAST IRON
CIP	CAST IRON PIPE
CL	CENTERLINE
CL ELEV	CENTERLINE ELEVATION
CLF	CHAIN LINK FENCE
CLR	CLEARANCE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CP1	CONTROL POINT NO. 1
Δ	DEFLECTION
DIP	DUCTILE IRON PIPE
DR	DRIVE
DWG	DRAWING
E	EASTING
EL	ELEVATION
ELEC	ELECTRIC
EOL	END OF LINE
EX	EXISTING
FH	FIRE HYDRANT
FL	FLOW LINE
FLG	FLANGE
FPB	FIBER OPTIC PULLBOX
GALV	GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
HTH	HIGH-TEST HYPOCHLORITE
HWY	HIGHWAY
IN	INCHES
INV	INVERT
K	TYPE K COPPER
LF	LINEAR FEET
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTHING
OC	ON CENTER
OD	OUTSIDE DIAMETER
PI	POINT OF INTERSECTION
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RT	RIGHT
R/W	RIGHT-OF-WAY
SEP	SEPARATION
SF	SQUARE FEET
SPEC	SPECIFICATION
ST	STREET
STA	STATION
t	THICKNESS
TBM	TEMPORARY BENCHMARK
TELE	TELEPHONE LINE
TMK	TELECOMMUNICATIONS MARKER
TP	TELEPHONE POLE
TWTS	TRACER WIRE TEST STATION
TYP	TYPICAL
UNK	UNKNOWN
UP	UTILITY POLE
VCP	VITRIFIED CLAY PIPE
W/	WITH
WM	WATER METER
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
Y	YES

GENERAL NOTES, LEGEND, AND ABBREVIATIONS

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 151
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

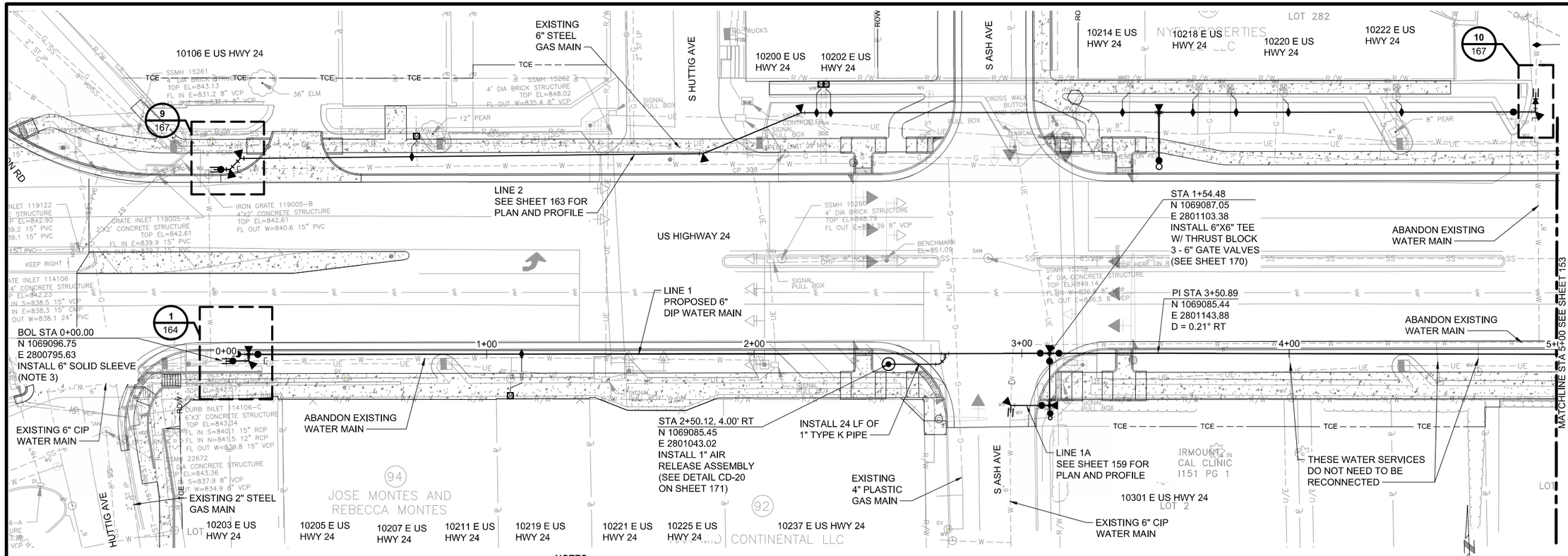
DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No. : 000165

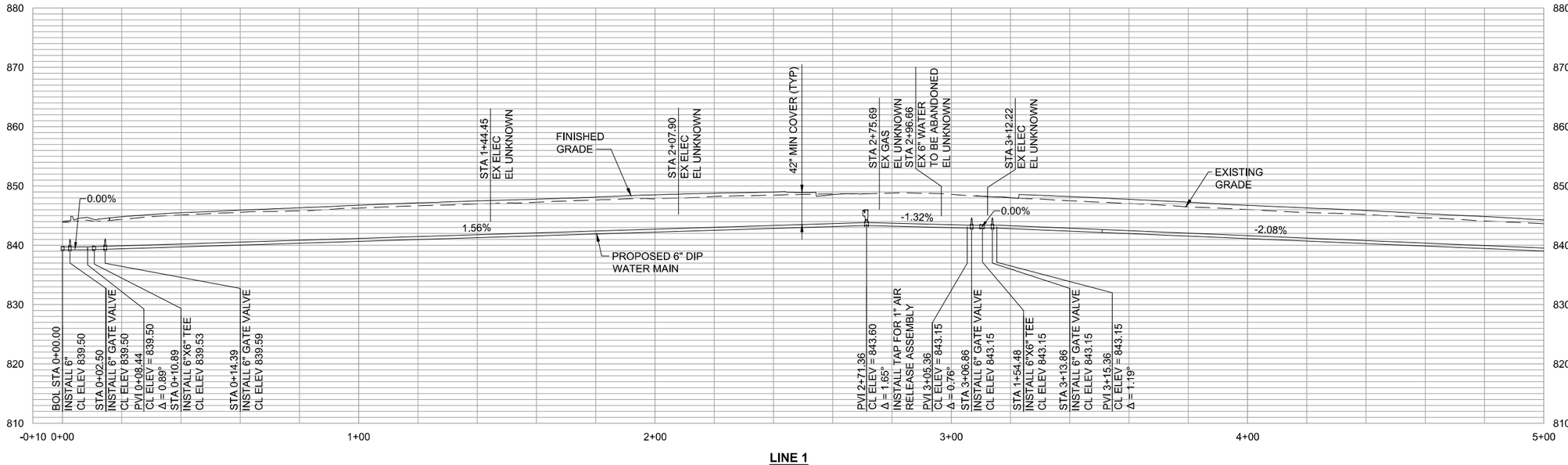
REV. :



WATER SERVICE TRANSFER TABLE						
ADDRESS	REGISTER NUMBER	EXISTING MAIN TO CURB		INSTALL CURB STOP ASSEMBLY	RELOCATE/ INSTALL METER	COMMENTS
		SIZE (IN)	TYPE			
10205/10207 E US HWY 24	0006946	3/4	G	Y	Y	

NOTES:

1. AT LOCATIONS WHERE EXISTING METER IS LOCATED INSIDE THE STRUCTURE, A NEW METER SET SHALL BE INSTALLED APPROXIMATELY 1 FOOT OUTSIDE OF RIGHT OF WAY. THE INSIDE METER ASSEMBLY SHALL BE REMOVED AND SERVICE LINES RECONNECTED AFTER PERMISSION TO ENTER THE HOME IS GRANTED BY THE PROPERTY OWNER.
2. WATER SERVICE LINE CONNECTIONS SHALL FOLLOW TYPICAL SERVICE LINE CONNECTION DETAILS ON SHEET 168.
3. TIE-IN TO EXISTING MAIN SHALL BE COMPLETED BY INDEPENDENCE WATER DEPARTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINAL REPAIRS.



LINE 1

PLAN AND PROFILE
LINE 1 BOL STA 0+00
TO STA 5+00

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24
STATE: MO
DISTRICT: KC
SHEET NO.: 152
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION
DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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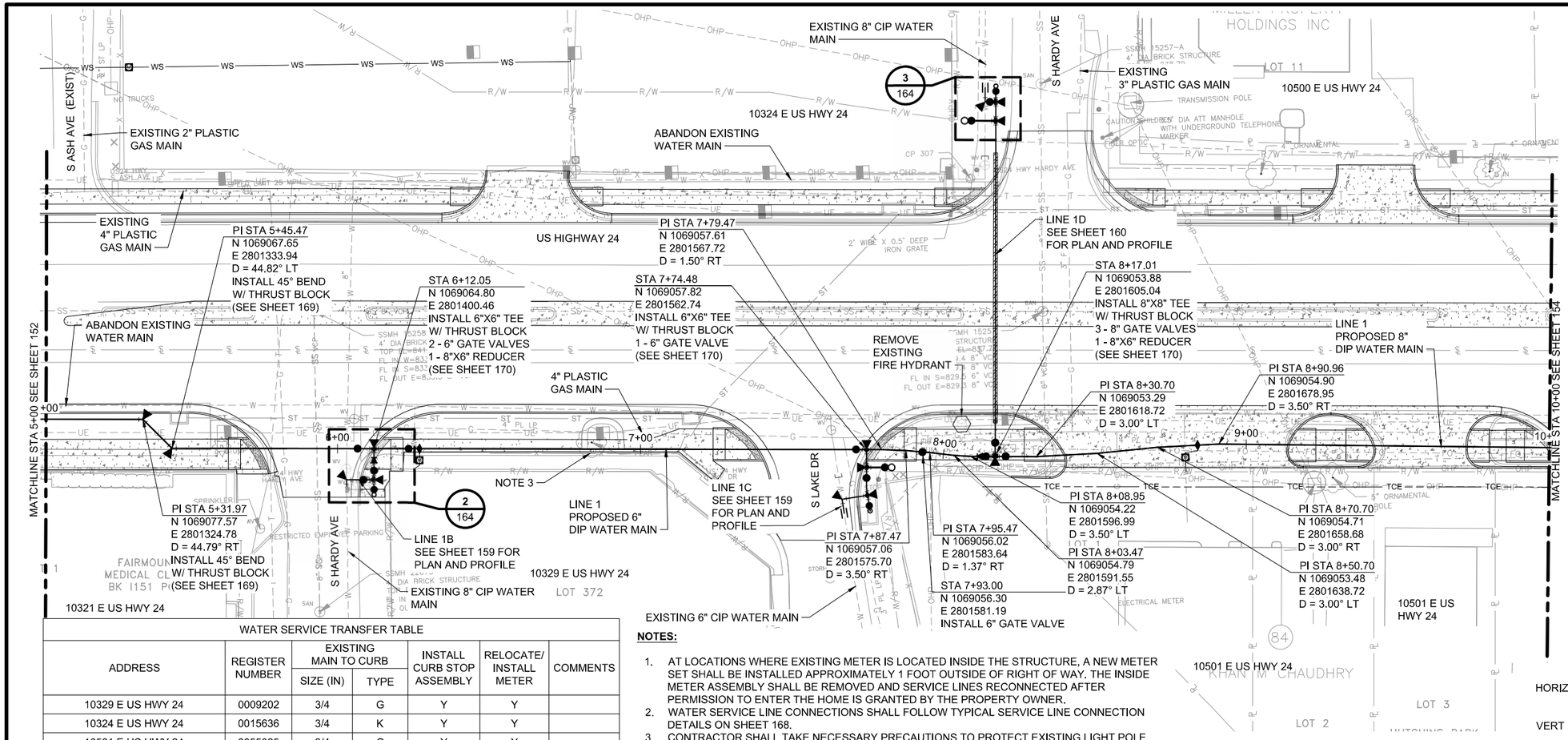
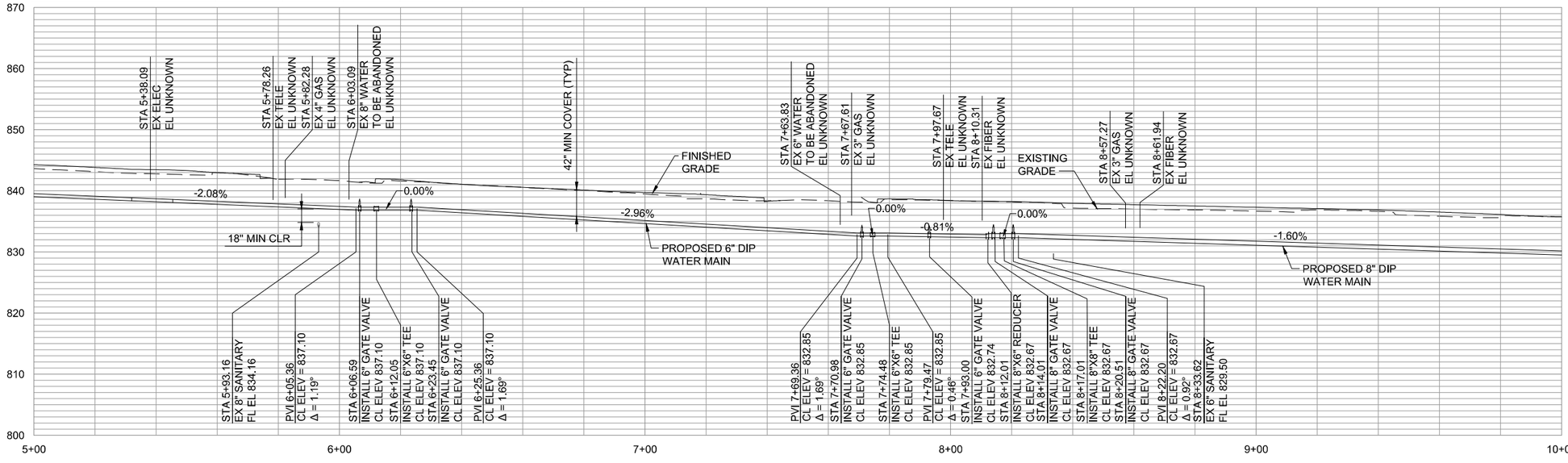


WATER SERVICE TRANSFER TABLE						
ADDRESS	REGISTER NUMBER	EXISTING MAIN TO CURB		INSTALL CURB STOP ASSEMBLY	RELOCATE/ INSTALL METER	COMMENTS
		SIZE (IN)	TYPE			
10329 E US HWY 24	0009202	3/4	G	Y	Y	
10324 E US HWY 24	0015636	3/4	K	Y	Y	
10501 E US HWY 24	0055025	3/4	G	Y	Y	

NOTES:

1. AT LOCATIONS WHERE EXISTING METER IS LOCATED INSIDE THE STRUCTURE, A NEW METER SET SHALL BE INSTALLED APPROXIMATELY 1 FOOT OUTSIDE OF RIGHT OF WAY. THE INSIDE METER ASSEMBLY SHALL BE REMOVED AND SERVICE LINES RECONNECTED AFTER PERMISSION TO ENTER THE HOME IS GRANTED BY THE PROPERTY OWNER.
2. WATER SERVICE LINE CONNECTIONS SHALL FOLLOW TYPICAL SERVICE LINE CONNECTION DETAILS ON SHEET 168.
3. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING LIGHT POLE.



LINE 1

PLAN AND PROFILE
LINE 1 STA 5+00 TO STA 10+00

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	153

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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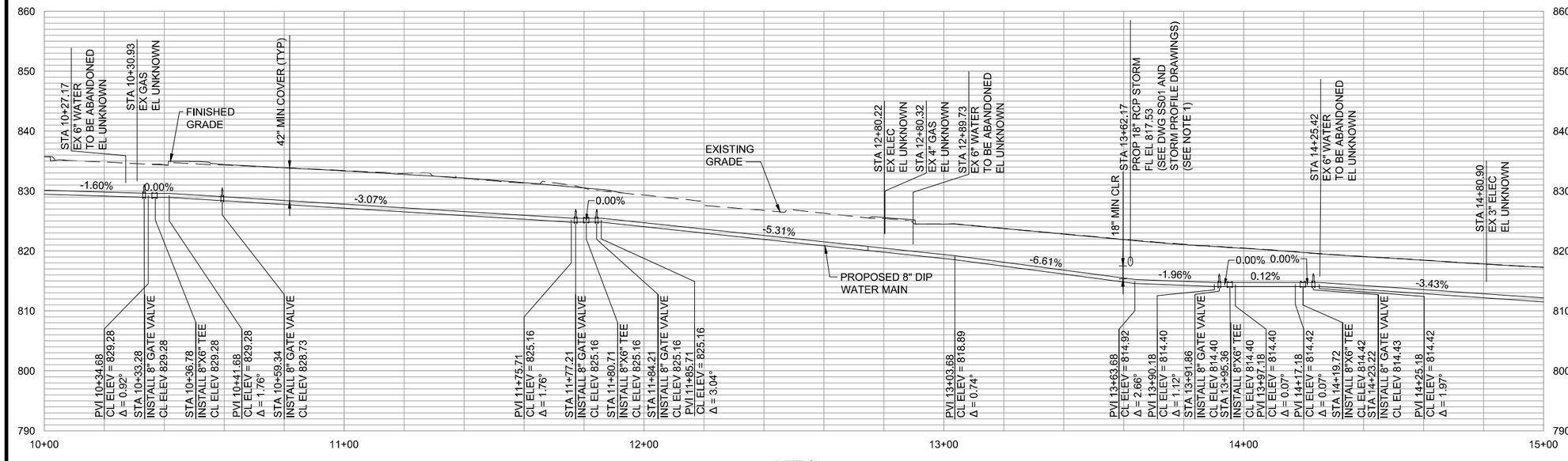
NOTES:

1. WHEN THE POTABLE WATER LINE CROSSES UNDERNEATH THE SANITARY OR STORM LINE, THE CONTRACTOR SHALL FOLLOW THE CITY OF INDEPENDENCE STANDARD DETAIL CD-18 ON SHEET 171.

EXISTING 3" PLASTIC GAS MAIN
EXISTING 6" CIP WATER MAIN
4 / 165
S WILLOW AVE
10514 E US HWY 24
5 / 165
EXISTING 6" CIP WATER MAIN
RALSTON AVE
ABANDON EXISTING WATER MAIN
STA 10+36.78
N 1069047.37
E 2801824.57
INSTALL 8"X6" TEE
W/ THRUST BLOCK
1 - 8" GATE VALVE
1 - 6" GATE VALVE
(SEE SHEET 170)
LINE 1F
SEE SHEET 160
FOR PLAN AND PROFILE
US HIGHWAY 24
LINE 1H
SEE SHEET 161 FOR
PLAN AND PROFILE
STA 14+19.72
N 1069046.63
E 2802199.45
INSTALL 8"X6" TEE
W/ THRUST BLOCK
1 - 8" GATE VALVE
1 - 6" GATE VALVE
(SEE SHEET 170)
MATCHLINE STA 10+00 SEE SHEET 153
LINE 1
PROPOSED 8" DIP
WATER MAIN
ABANDON EXISTING WATER MAIN
EXISTING 4" PLASTIC GAS MAIN
PI STA 13+03.68
N 1069054.52
E 2802083.68
D = 45.75° RT
INSTALL 45° BEND
W/ THRUST BLOCK
(SEE SHEET 169)
MATCHLINE STA 15+00 SEE SHEET 155
LINE 1E
SEE SHEET 160
FOR PLAN AND PROFILE
STA 10+59.34
N 1069046.21
E 2801847.10
INSTALL 8" GATE VALVE
10521 E US HWY 24
E 6TH ST
EXISTING 6" CIP WATER MAIN
10503 E US HWY 24
EXISTING 3" PLASTIC GAS MAIN
STA 11+80.71
N 1069039.94
E 2801968.31
INSTALL 8"X6" TEE
W/ THRUST BLOCK
2 - 8" GATE VALVES
1 - 6" GATE VALVE
(SEE SHEET 170)
PI STA 12+74.68
N 1069035.09
E 2802062.16
D = 45.03° LT
INSTALL 45° BEND
W/ THRUST BLOCK
(SEE SHEET 169)
10517 E US HWY 24
STA 13+95.36
N 1069048.39
E 2802175.15
INSTALL 8"X6" TEE
W/ THRUST BLOCK
1 - 8" GATE VALVE
1 - 6" GATE VALVE
(SEE SHEET 170)
10541 E US HWY 24
EXISTING 6" CIP WATER MAIN
S NORTHERN BLVD
LINE 1G
SEE SHEET 161 FOR
PLAN AND PROFILE
EXISTING 4" PLASTIC GAS MAIN

SCALE
HORIZ 0 20 40 60
VERT 0 10 20 30



LINE 1

PLAN AND PROFILE
LINE 1 STA 10+00 TO
STA 15+00

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 154
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

REV.

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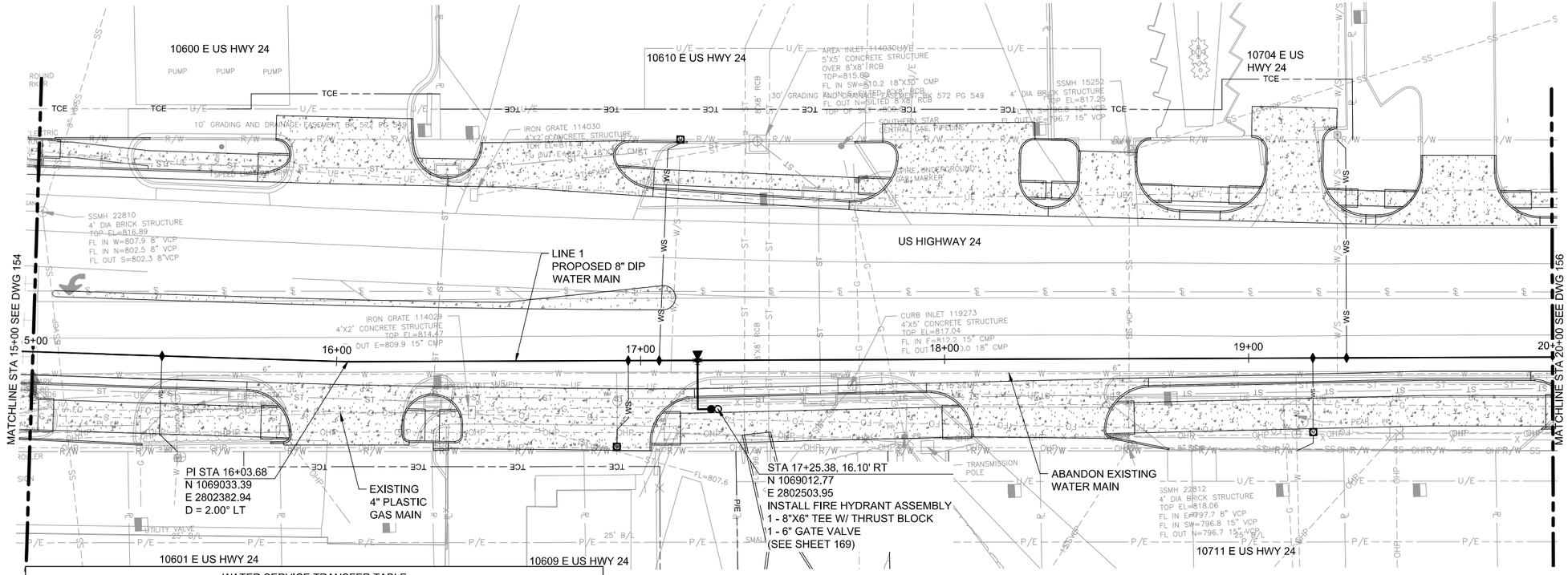


WATER SERVICE TRANSFER TABLE						
ADDRESS	REGISTER NUMBER	EXISTING MAIN TO CURB		INSTALL CURB STOP ASSEMBLY	RELOCATE/ INSTALL METER	COMMENTS
		SIZE (IN)	TYPE			
10601 E US HWY 24	0042837	1 1/2	K	Y	NO	
10609 E US HWY 24	0016740	3/4	K	Y	Y	
10610 E US HWY 24	0030061	1	K	Y	Y	
10711 E US HWY 24	0015264	3/4	G	Y	Y	
10704 E US HWY 24	0042537	3/4	K	Y	NO	

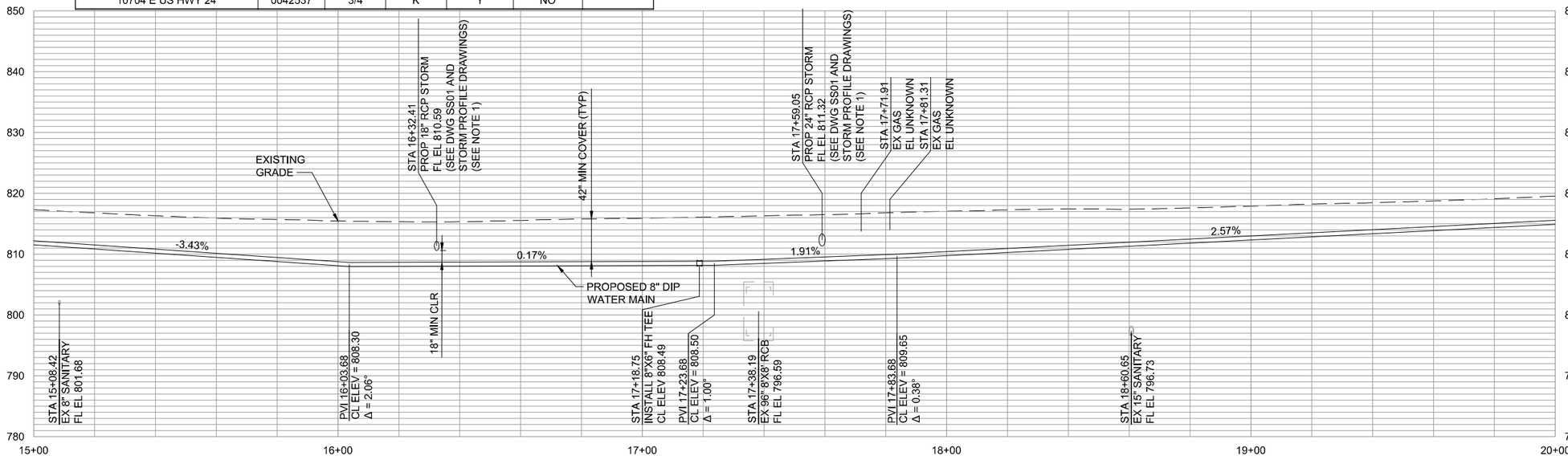
NOTES:

1. WHEN THE POTABLE WATER LINE CROSSES UNDERNEATH THE SANITARY OR STORM LINE, THE CONTRACTOR SHALL FOLLOW THE CITY OF INDEPENDENCE STANDARD DETAIL CD-18 ON SHEET 171.
2. AT LOCATIONS WHERE EXISTING METER IS LOCATED INSIDE THE STRUCTURE, A NEW METER SET SHALL BE INSTALLED APPROXIMATELY 1 FOOT OUTSIDE OF RIGHT OF WAY. THE INSIDE METER ASSEMBLY SHALL BE REMOVED AND SERVICE LINES RECONNECTED AFTER PERMISSION TO ENTER THE HOME IS GRANTED BY THE PROPERTY OWNER.
3. WATER SERVICE LINE CONNECTIONS SHALL FOLLOW TYPICAL SERVICE LINE CONNECTION DETAILS ON SHEET 168.

SCALE

HORIZ 0 20 40 60

VERT 0 10 20 30



LINE 1

PLAN AND PROFILE
LINE 1 STA 15+00 TO
STA 20+00

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	155

COUNTY: JACKSON

JOB NO.: JKU0226

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DATE	DESCRIPTION

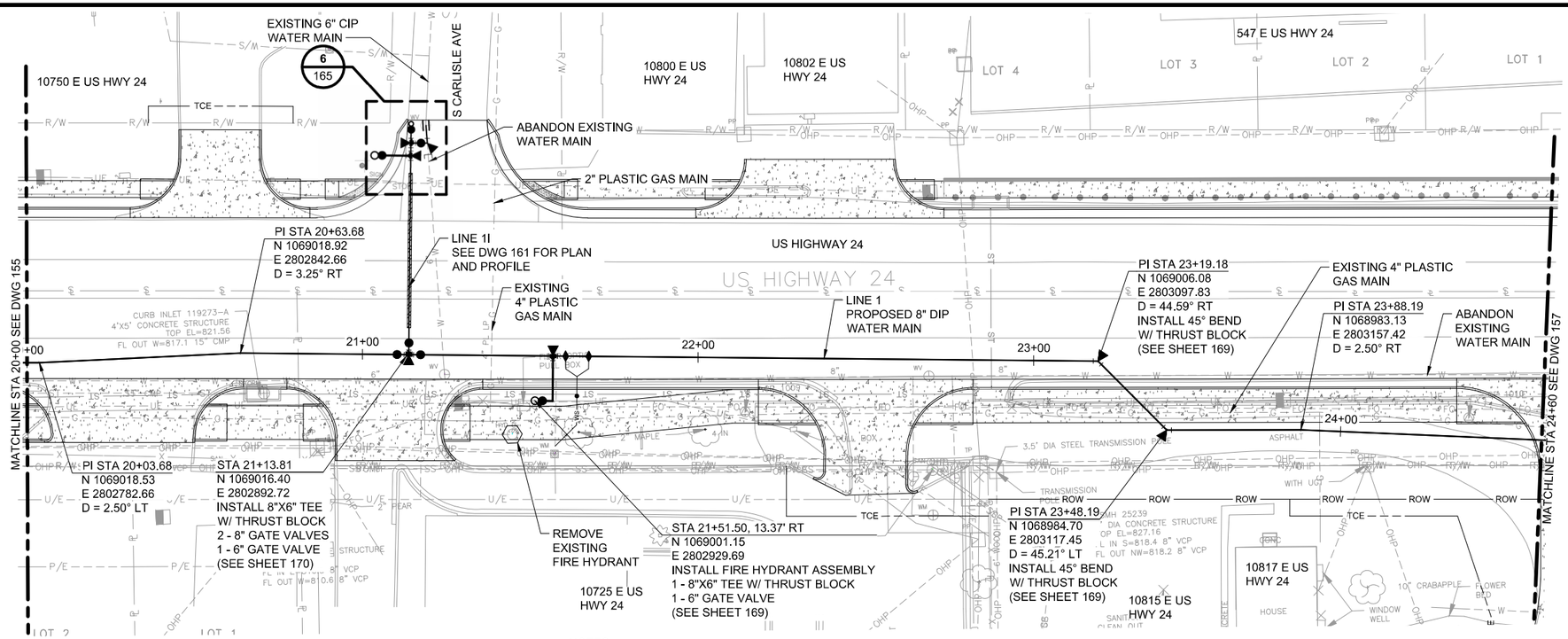
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

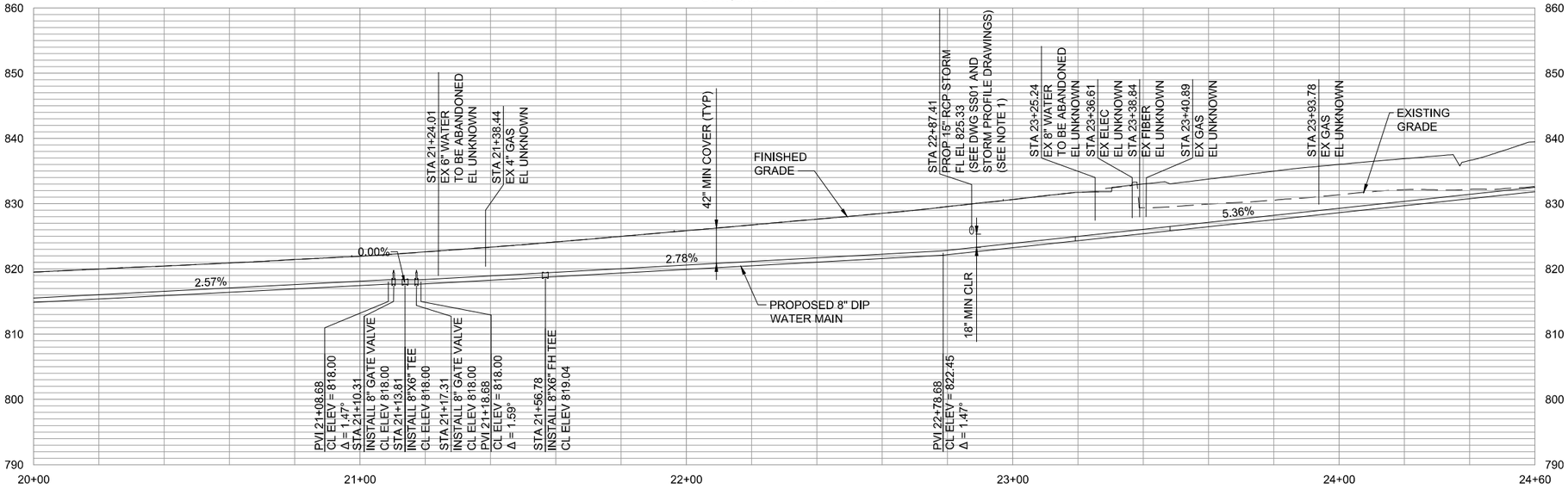
REV.:



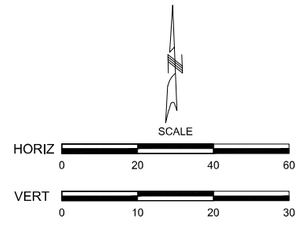
NOTES:

1. WHEN THE POTABLE WATER LINE CROSSES UNDERNEATH THE SANITARY OR STORM LINE, THE CONTRACTOR SHALL FOLLOW THE CITY OF INDEPENDENCE STANDARD DETAIL CD-18 ON SHEET 171.
2. AT LOCATIONS WHERE EXISTING METER IS LOCATED INSIDE THE STRUCTURE, A NEW METER SET SHALL BE INSTALLED APPROXIMATELY 1 FOOT OUTSIDE OF RIGHT OF WAY. THE INSIDE METER ASSEMBLY SHALL BE REMOVED AND SERVICE LINES RECONNECTED AFTER PERMISSION TO ENTER THE HOME IS GRANTED BY THE PROPERTY OWNER.
3. WATER SERVICE LINE CONNECTIONS SHALL FOLLOW TYPICAL SERVICE LINE CONNECTION DETAILS ON SHEET 168.
4. CONTRACTOR SHALL COORDINATE WITH HIGHWAY PROJECT SO THAT THE GRADING OF THE SHOULDER IS COMPLETE PRIOR TO INSTALLING THE WATER MAIN IN BETWEEN STATIONS 24+40 AND 25+40.

WATER SERVICE TRANSFER TABLE						
ADDRESS	REGISTER NUMBER	EXISTING MAIN TO CURB		INSTALL CURB STOP ASSEMBLY	RELOCATE/ INSTALL METER	COMMENTS
		SIZE (IN)	TYPE			
10725 E US HWY 24	003915	2	K	Y	NO	



LINE 1



PLAN AND PROFILE
LINE 1 STA 20+00
TO STA 24+60

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	156

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DATE	DESCRIPTION	REV.

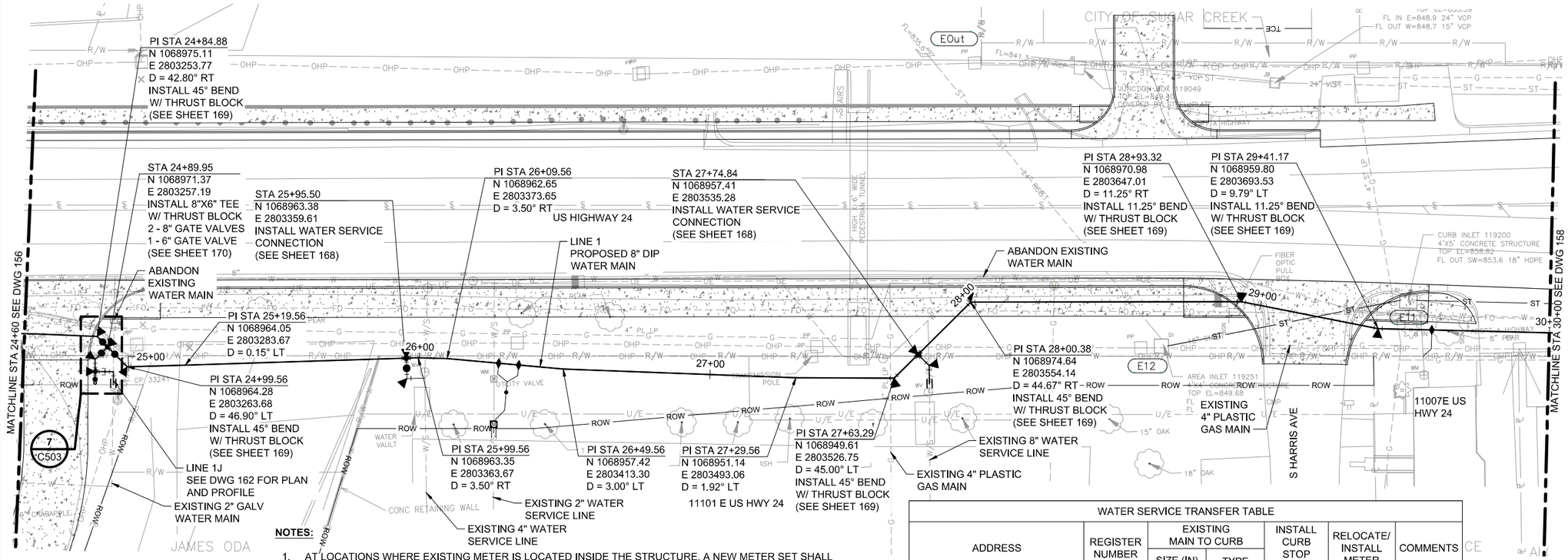
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

c:\users\wsriley\dc\accdocs\burns & mcdonnell\154050_24_hwy_complete_st_ph_3\project files\wtr\prod dwgs\154050_line 1 p&p.dwg 2:51:46 AM 4/17/2024



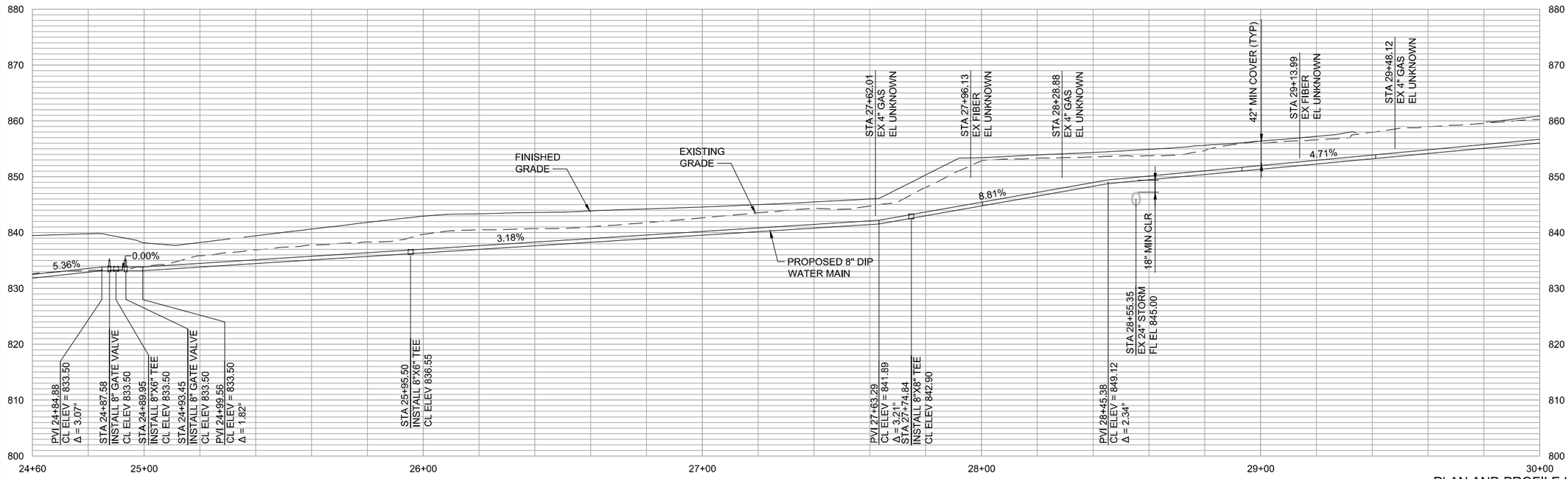
NOTES:

1. AT LOCATIONS WHERE EXISTING METER IS LOCATED INSIDE THE STRUCTURE, A NEW METER SET SHALL BE INSTALLED APPROXIMATELY 1 FOOT OUTSIDE OF RIGHT OF WAY. THE INSIDE METER ASSEMBLY SHALL BE REMOVED AND SERVICE LINES RECONNECTED AFTER PERMISSION TO ENTER THE HOME IS GRANTED BY THE PROPERTY OWNER.
2. WATER SERVICE LINE CONNECTIONS SHALL FOLLOW TYPICAL SERVICE LINE CONNECTION DETAILS ON SHEET 168.
3. CONTRACTOR SHALL COORDINATE WITH HIGHWAY PROJECT SO THAT THE GRADING OF THE SHOULDER IS COMPLETE PRIOR TO INSTALLING THE WATER MAIN IN BETWEEN STATIONS 24+40 AND 25+40.

WATER SERVICE TRANSFER TABLE

ADDRESS	REGISTER NUMBER	EXISTING MAIN TO CURB		INSTALL CURB STOP ASSEMBLY	RELOCATE/ INSTALL METER	COMMENTS
		SIZE (IN)	TYPE			
11101 E US HWY 24	0044393	8	DIP	NO	NO	
11101 E US HWY 24	0044394	2	K	NO	Y	
11101 E US HWY 24	0023351	4	DIP	NO	NO	
11007 E US HWY 24	0026289	3/4	K	Y	NO	

SCALE
HORIZ 0 20 40 60
VERT 0 10 20 30



LINE 1

PLAN AND PROFILE LINE 1
STA 24+60 TO STA 30+00

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	157

COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

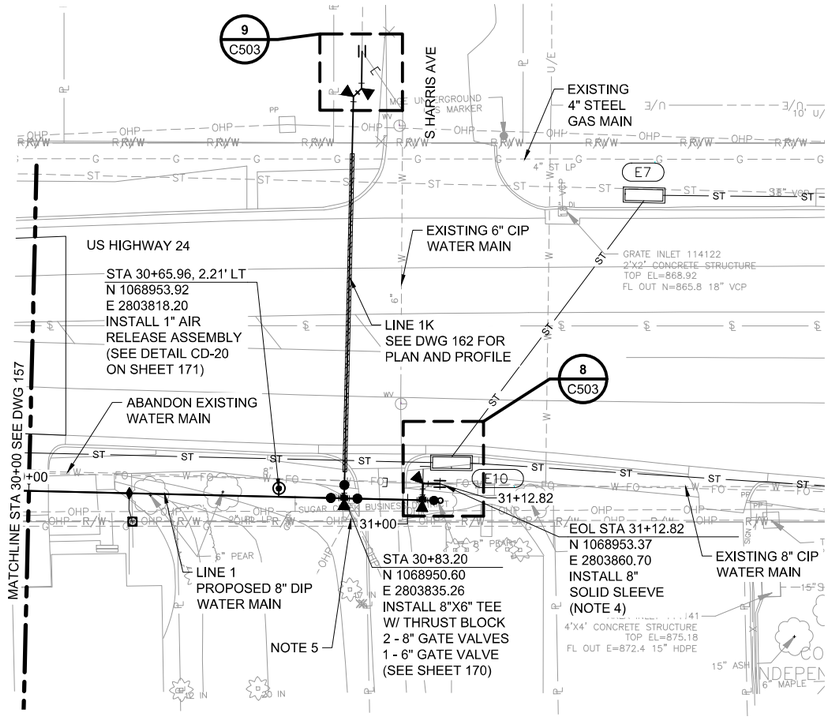
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

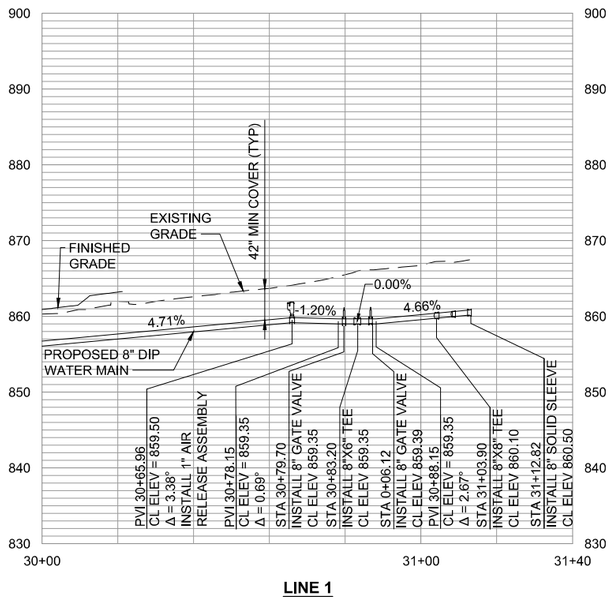
BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

REV.

c:\users\wsriley\dc\accdocs\burns & mcdonnell\154050_24_hwy_complete_st_ph_3\project files\wtr\prod dwgs\154050_line 1 p&p.dwg 2:51:46 AM 4/17/2024



WATER SERVICE TRANSFER TABLE						
ADDRESS	REGISTER NUMBER	EXISTING MAIN TO CURB		INSTALL CURB STOP ASSEMBLY	RELOCATE/ INSTALL METER	COMMENTS
		SIZE (IN)	TYPE			
11009 E US HWY 24	0005979	3/4	G	Y	Y	



LINE 1

NOTES:

1. WHEN THE POTABLE WATER LINE CROSSES UNDERNEATH THE SANITARY OR STORM LINE. THE CONTRACTOR SHALL FOLLOW THE CITY OF INDEPENDENCE STANDARD DETAIL CD-18 ON SHEET 171.
2. AT LOCATIONS WHERE EXISTING METER IS LOCATED INSIDE THE STRUCTURE, A NEW METER SET SHALL BE INSTALLED APPROXIMATELY 1 FOOT OUTSIDE OF RIGHT OF WAY. THE INSIDE METER ASSEMBLY SHALL BE REMOVED AND SERVICE LINES RECONNECTED AFTER PERMISSION TO ENTER THE HOME IS GRANTED BY THE PROPERTY OWNER.
3. WATER SERVICE LINE CONNECTIONS SHALL FOLLOW TYPICAL SERVICE LINE CONNECTION DETAILS ON SHEET 168.
4. TIE-IN TO EXISTING MAIN SHALL BE COMPLETED BY INDEPENDENCE WATER DEPARTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINAL REPAIRS.
5. CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT EXISTING OVERHEAD ELECTRIC POLE.

SCALE

HORIZ 0 20 40 60

VERT 0 10 20 30

PLAN AND PROFILE
LINE 1 STA 30+00 TO
EOL STA 31+12.82

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	158

COUNTY: JACKSON

JOB NO.: JKU0226

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

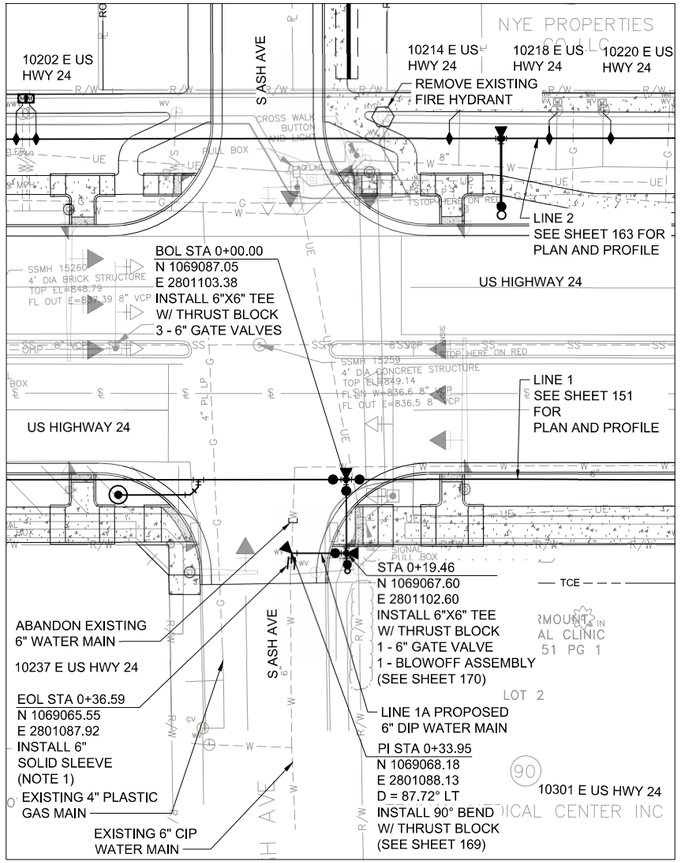
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

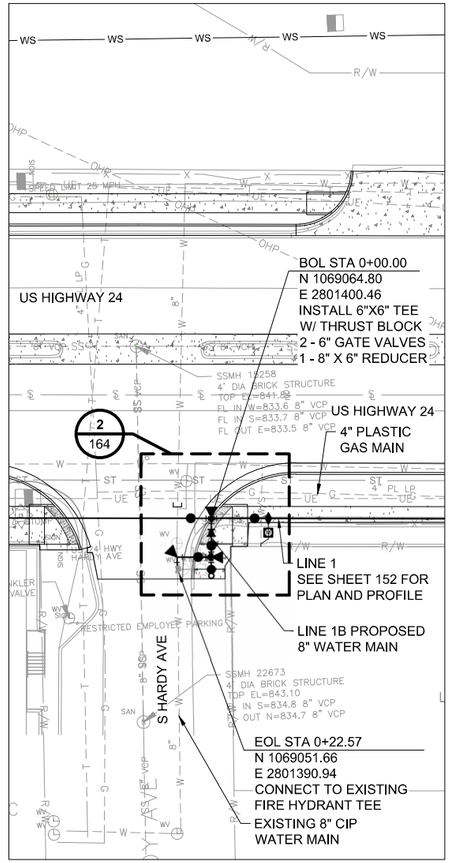
REV.

NOTES:

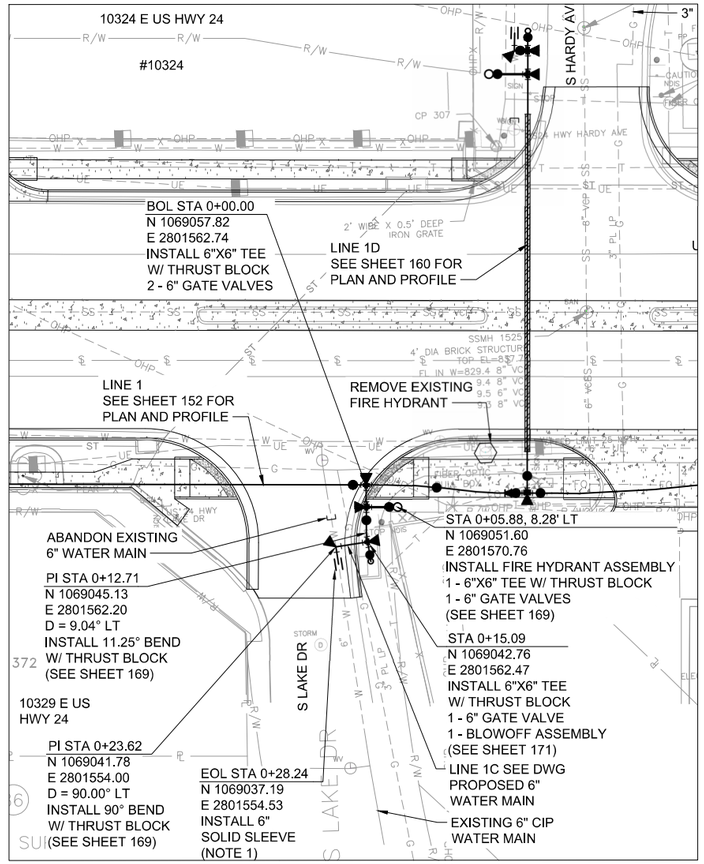
1. TIE-IN TO EXISTING MAIN WILL BE COMPLETED BY INDEPENDENCE WATER DEPARTMENT. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL AND FINAL REPAIRS. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFF FOR TESTING AND DISINFECTION.



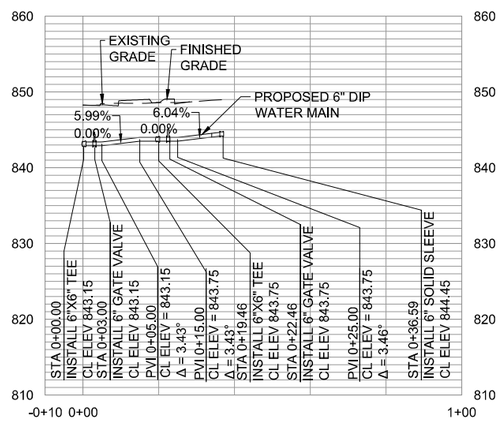
LINE 1A



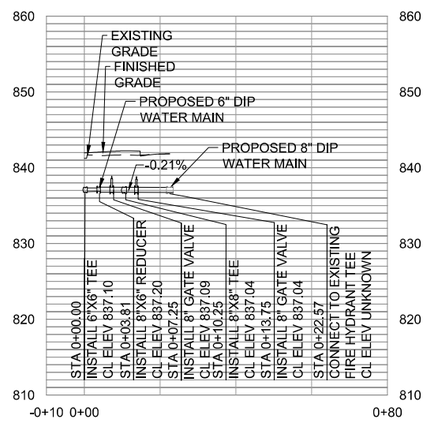
LINE 1B



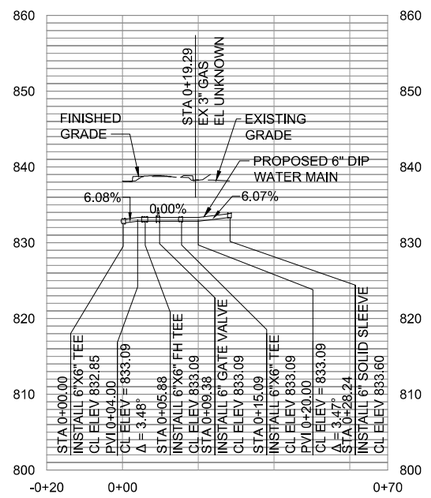
LINE 1C



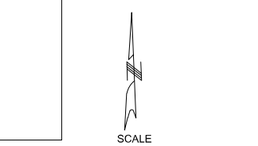
LINE 1A



LINE 1B



LINE 1C



PLAN AND PROFILE
LINES 1A, 1B AND 1C

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 159
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

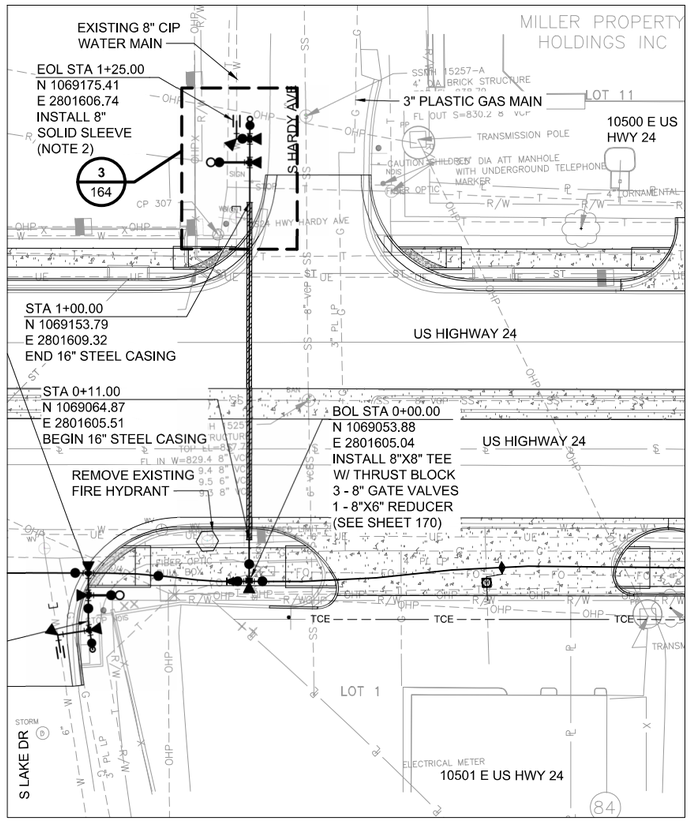
DATE	DESCRIPTION

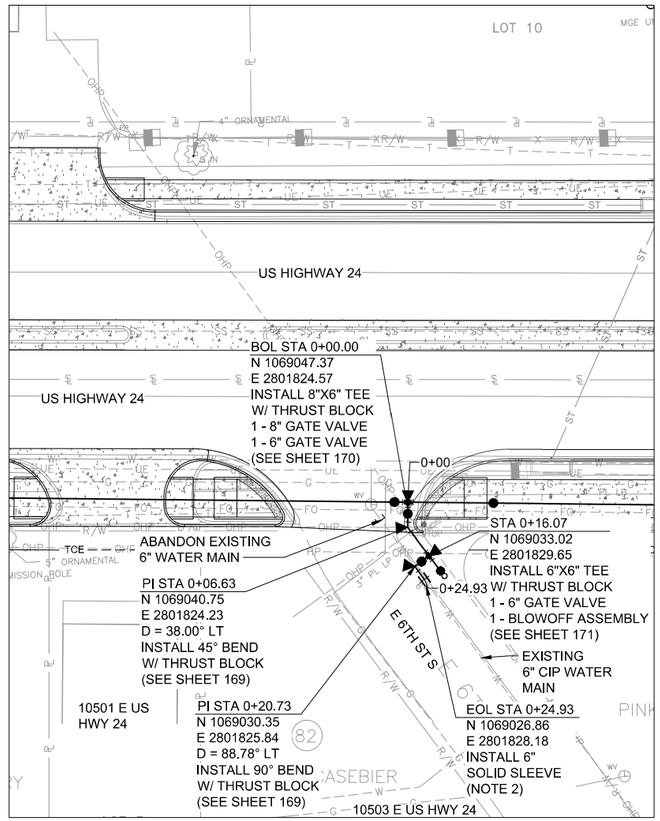
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

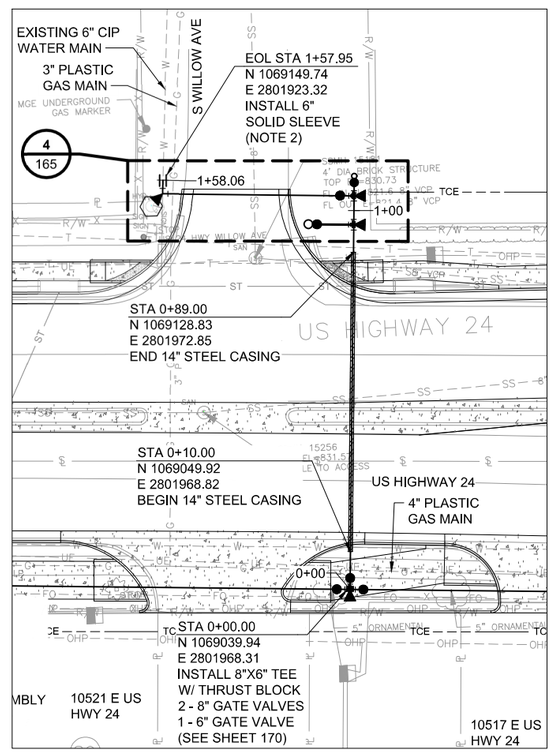
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
MoDOT

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.:







NOTES:

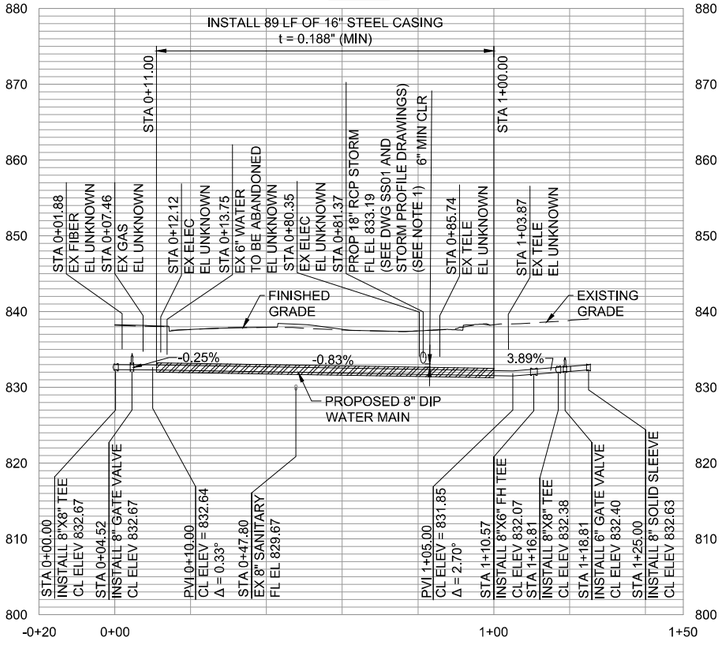
1. WHEN THE POTABLE WATER LINE CROSSES UNDERNEATH THE SANITARY OR STORM LINE, THE CONTRACTOR SHALL FOLLOW THE CITY OF INDEPENDENCE STANDARD DETAIL CD-18 ON SHEET 171.
2. TIE-IN TO EXISTING MAIN SHALL BE COMPLETED BY INDEPENDENCE WATER DEPARTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINAL REPAIRS. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFF FOR TESTING AND DISINFECTION.

SCALE

HORIZ 0 20 40 60

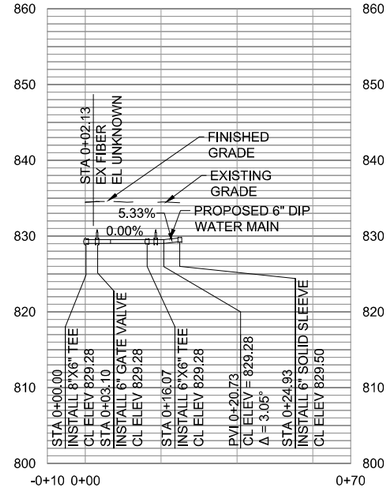
VERT 0 10 20 30

LINE 1D



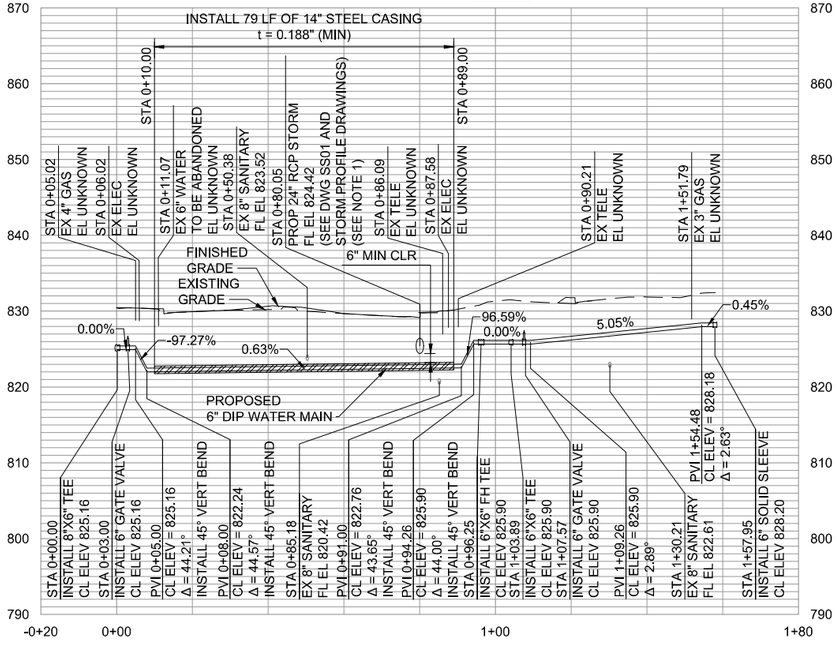
LINE 1D

LINE 1E



LINE 1E

LINE 1F



LINE 1F

PLAN AND PROFILE
LINES 1D, 1E AND 1F

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED	1 / 18 / 2024
ROUTE	24
STATE	MO
DISTRICT	KC
SHEET NO.	160
COUNTY	JACKSON
JOB NO.	JKU0226
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

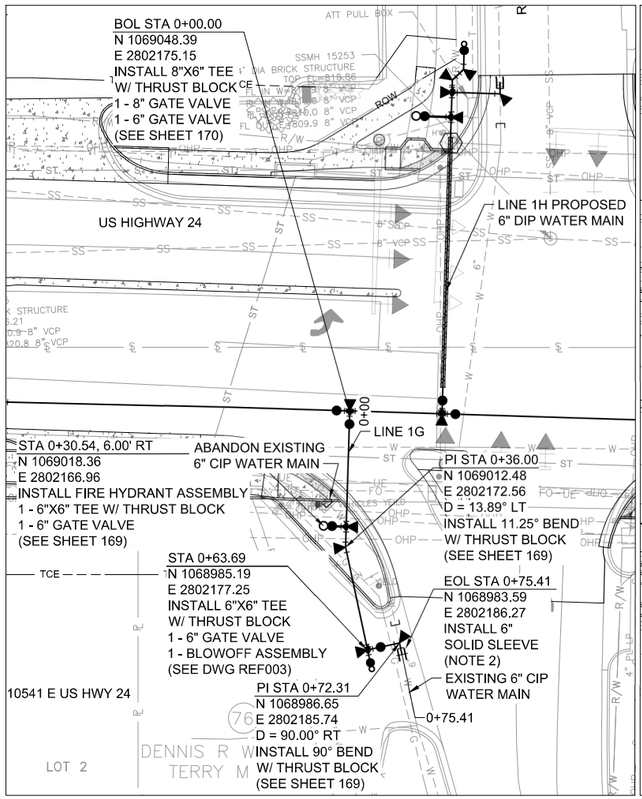
DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

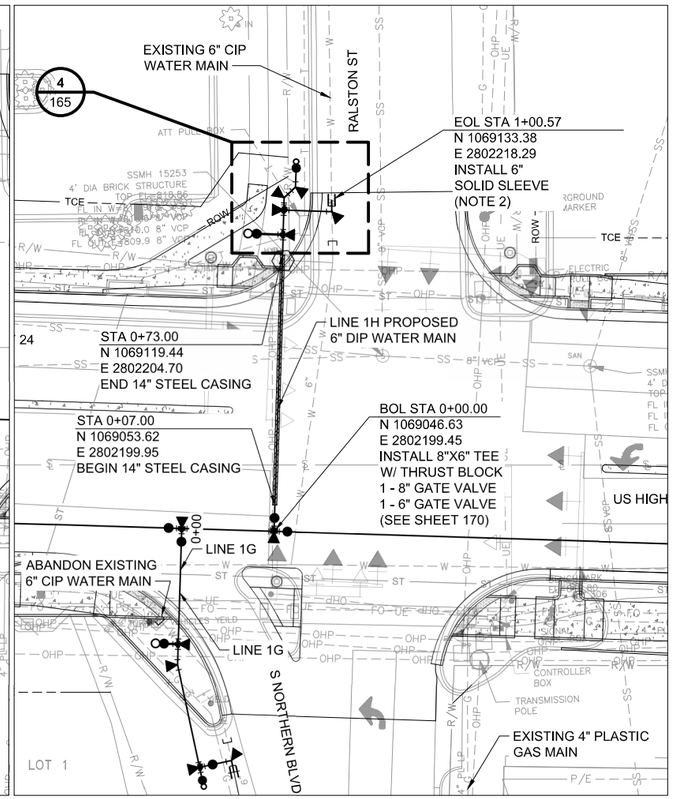
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

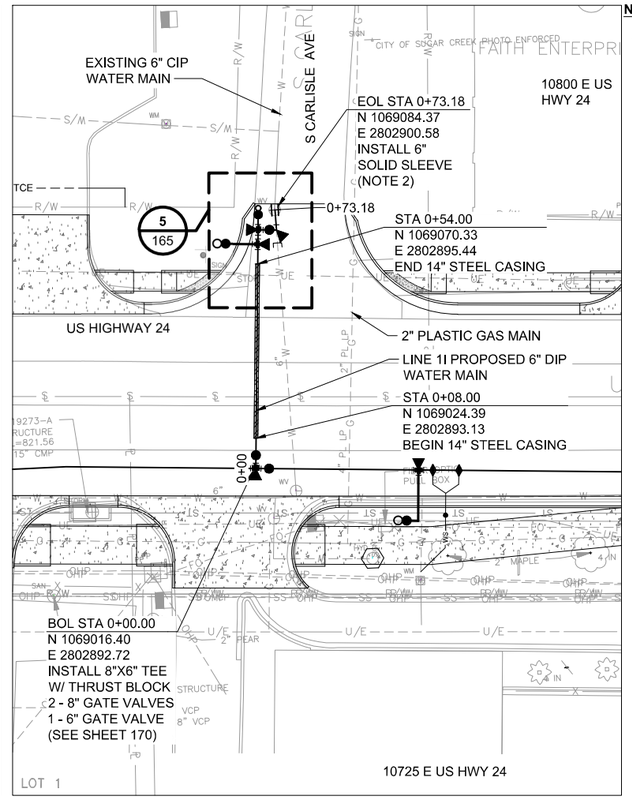
REV. .



LINE 1G



LINE 1H



LINE 1I

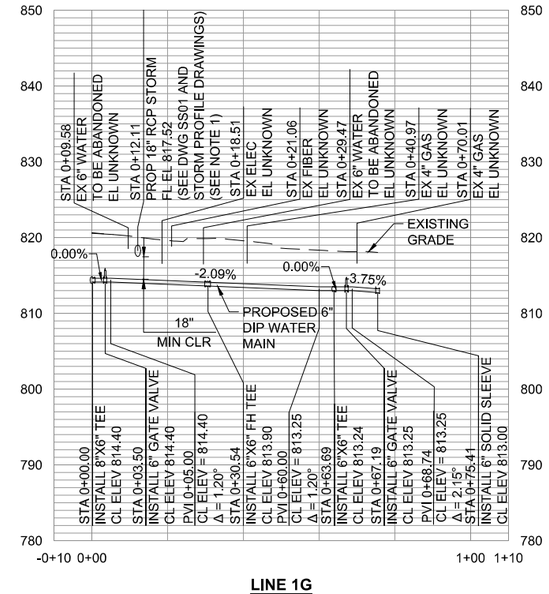
NOTES:

1. WHEN THE POTABLE WATER LINE CROSSES UNDERNEATH THE SANITARY OR STORM LINE, THE CONTRACTOR SHALL FOLLOW THE CITY OF INDEPENDENCE STANDARD DETAIL CD-18 ON SHEET 171.
2. TIE-IN TO EXISTING MAIN SHALL BE COMPLETED BY INDEPENDENCE WATER DEPARTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINAL REPAIRS. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFF FOR TESTING AND DISINFECTION.

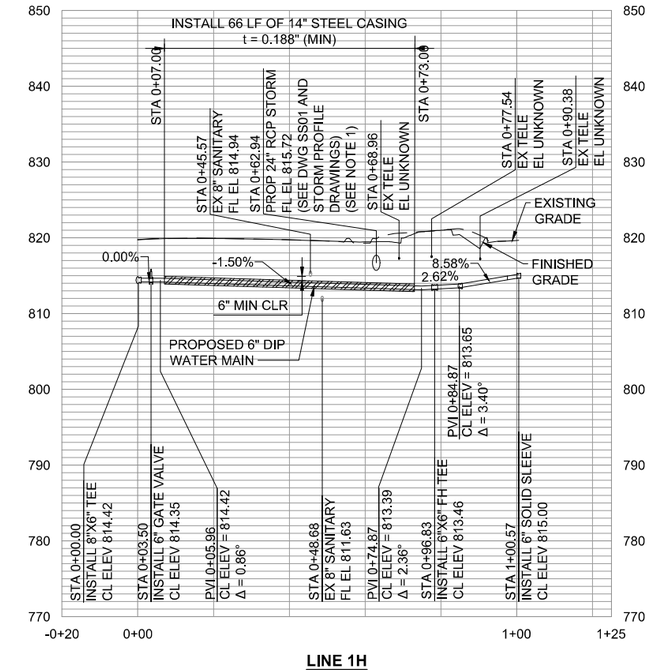
SCALE

HORIZ 0 20 40 60

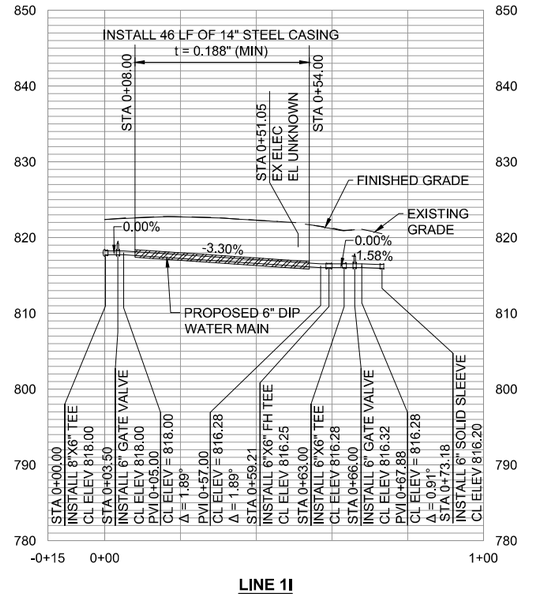
VERT 0 10 20 30



LINE 1G



LINE 1H



LINE 1I

PLAN AND PROFILE
LINES 1G, 1H AND 1I

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED	1 / 18 / 2024
ROUTE 24	STATE MO
DISTRICT KC	SHEET NO. 161
COUNTY	JACKSON
JOB NO.	JKU0226
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

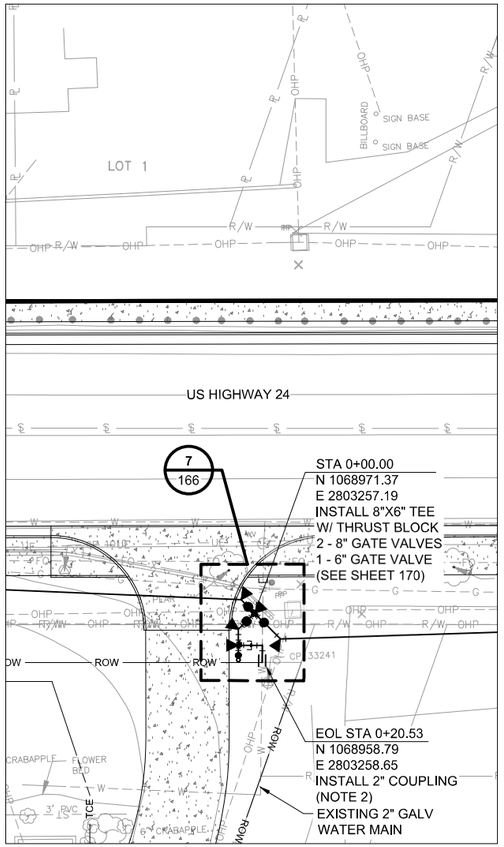
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

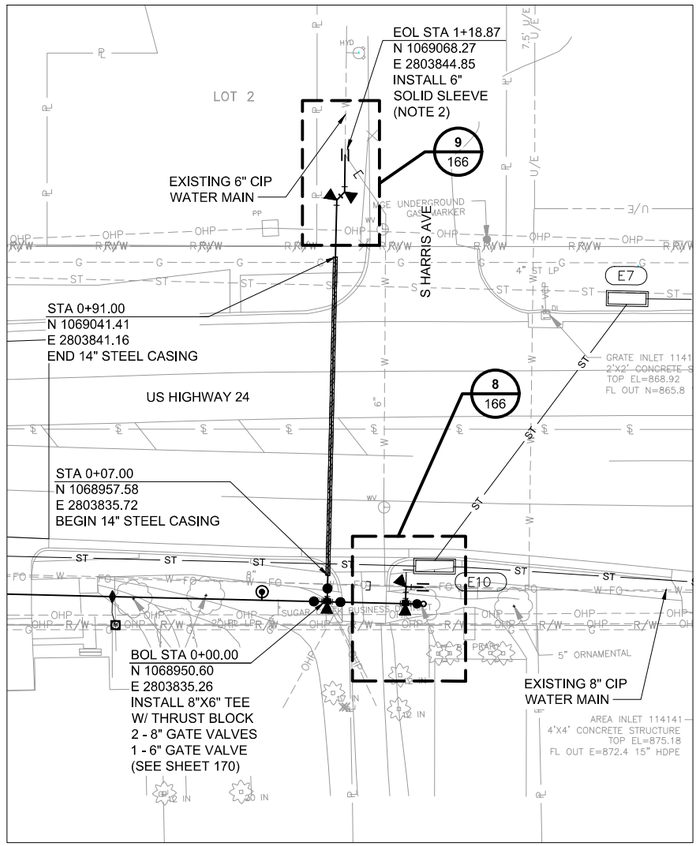
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

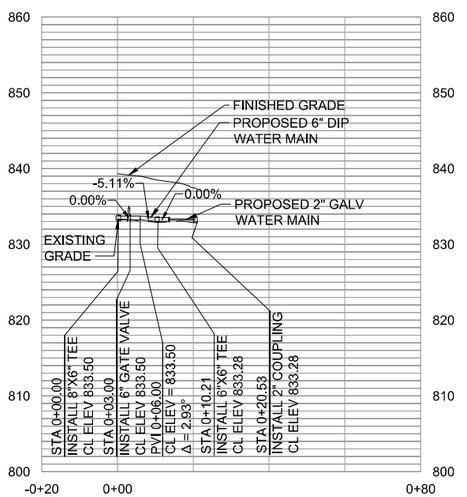
REV. :



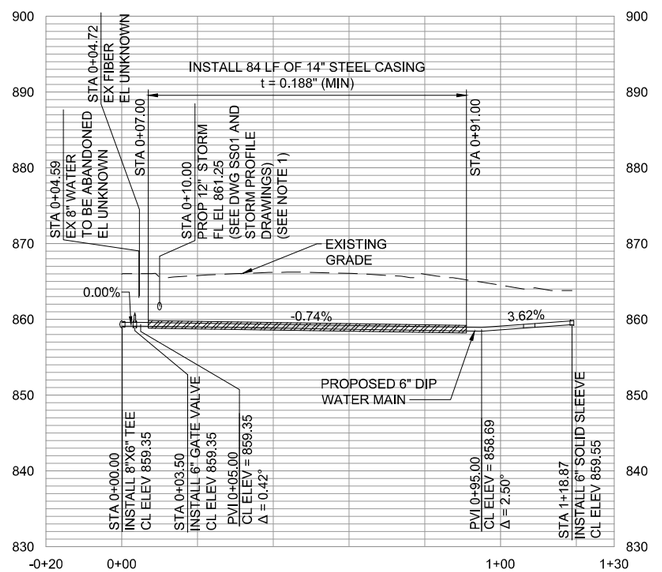
LINE 1J



LINE 1K



LINE 1J



LINE 1K

NOTES:

1. LINE CROSSES UNDERNEATH THE SANITARY OR STORM LINE, THE CONTRACTOR SHALL FOLLOW THE CITY OF INDEPENDENCE STANDARD DETAIL CD-18 ON SHEET 171.
2. TIE-IN TO EXISTING MAIN SHALL BE COMPLETED BY INDEPENDENCE WATER DEPARTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINAL REPAIRS. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFF FOR TESTING AND DISINFECTION.

SCALE

HORIZ 0 20 40 60

VERT 0 10 20 30

PLAN AND PROFILE
LINES 1J AND 1K

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
1 / 18 / 2024

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	162

COUNTY
JACKSON

JOB NO.
JKU0226

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)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No.: 000165

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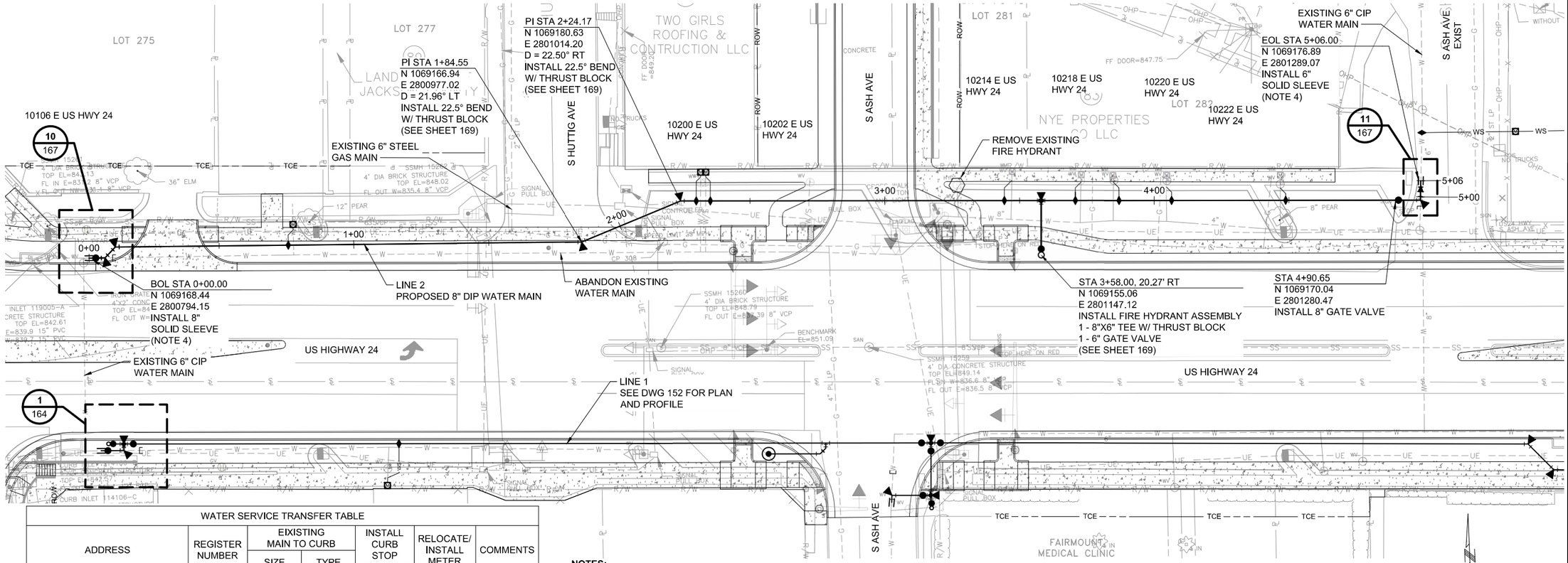
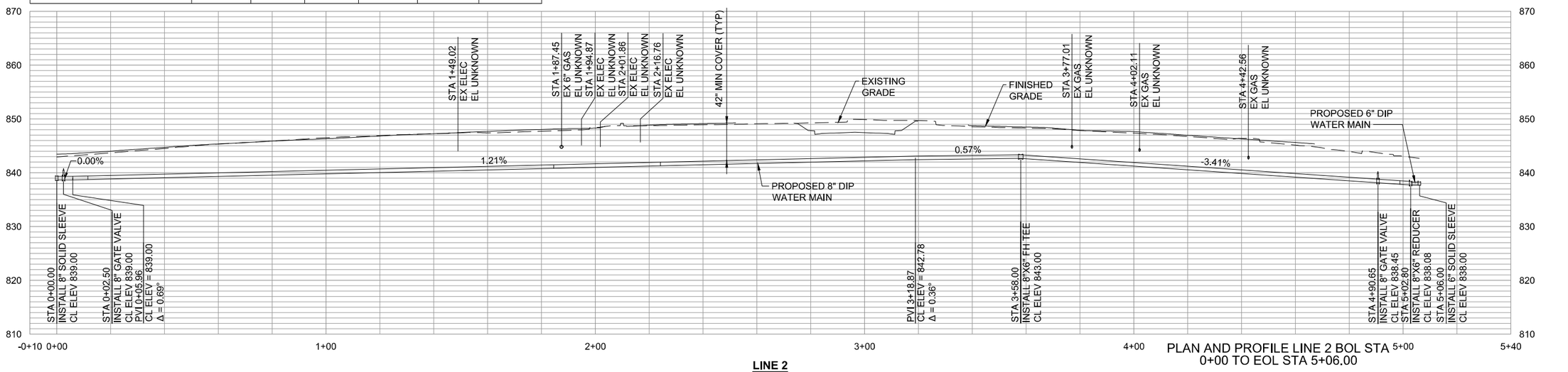
REV. -



WATER SERVICE TRANSFER TABLE						
ADDRESS	REGISTER NUMBER	EIXISTING MAIN TO CURB		INSTALL CURB STOP ASSEMBLY	RELOCATE/ INSTALL METER	COMMENTS
		SIZE	TYPE			
10106 E US HWY 24	0009227	3/4	G	Y	Y	
10200 E US HWY 24	0000188	3/4	G	Y	Y	
10202 E US HWY 24	0011764	1	G	Y	Y	
10214 E US HWY 24	0011761	3/4	G	Y	NO	
10218 E US HWY 24	0011762	3/4	K	Y	NO	
11220 E US HWY 24	0011763	3/4	G	Y	NO	
11220 E US HWY 24	0006437	UNK	UNK	Y	NO	
11220 E US HWY 24	0011794	3/4	G	Y	NO	

NOTES:

1. INSTALL DOUBLE THICKNESS POLYETHYLENE WRAP ON WATER MAIN ON LINE 2.
2. AT LOCATIONS WHERE EXISTING METER IS LOCATED INSIDE THE STRUCTURE, A NEW METER SET SHALL BE INSTALLED APPROXIMATELY 1 FOOT OUTSIDE OF RIGHT OF WAY. THE INSIDE METER ASSEMBLY SHALL BE REMOVED AND SERVICE LINES RECONNECTED AFTER PERMISSION TO ENTER THE HOME IS GRANTED BY THE PROPERTY OWNER.
3. WATER SERVICE LINE CONNECTIONS SHALL FOLLOW TYPICAL SERVICE LINE CONNECTION DETAILS ON SHEET 168.
4. TIE-IN TO EXISTING MAIN SHALL BE COMPLETED BY INDEPENDENCE WATER DEPARTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINAL REPAIRS.



PLAN AND PROFILE LINE 2 BOL STA 0+00 TO EOL STA 5+06.00

LINE 2

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 163
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

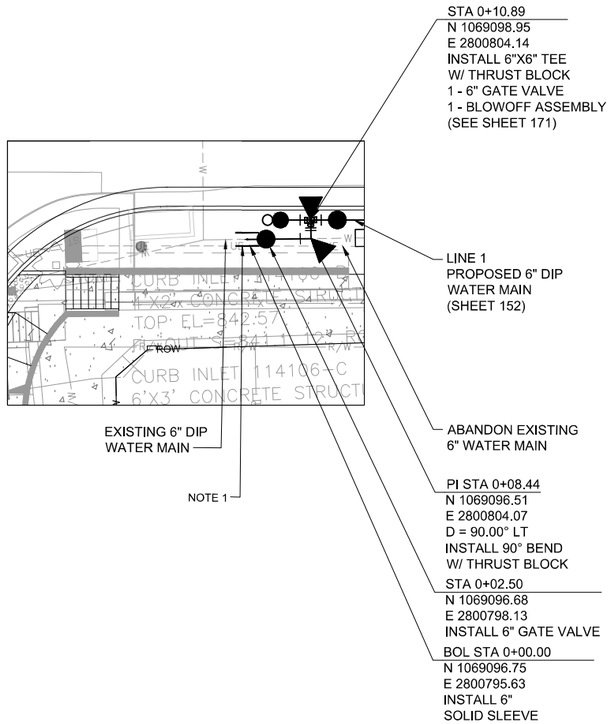
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

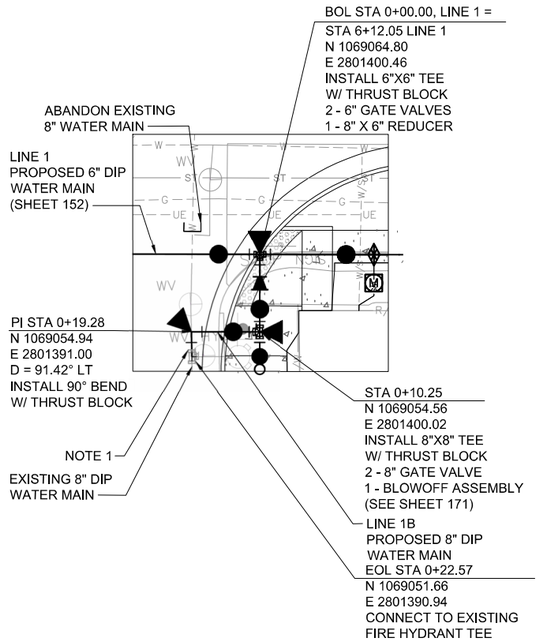
BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV:

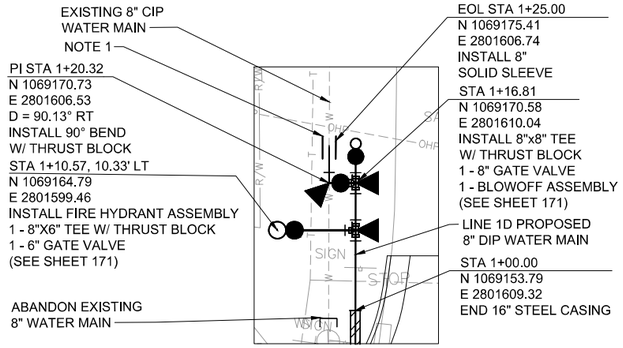
c:\users\wsriley\dc\accdocs\burns & mcdonnell\154050_24_hwy_complete_st_ph_3\project files\wtr\prod dwgs\154050_line 2 p&p.dwg 2:49:55 AM 4/17/2024



BOL LINE 1 PERMANENT CONNECTION DETAIL
RESTRAIN ALL JOINTS
1" = 10'
1 / 152



LINE 1B PERMANENT CONNECTION DETAIL
RESTRAIN ALL JOINTS
1" = 10'
2 / 159



LINE 1D PERMANENT CONNECTION DETAIL
RESTRAIN ALL JOINTS
1" = 10'
3 / 160

NOTES:

1. TIE-IN TO EXISTING MAIN SHALL BE COMPLETED BY I.W.D. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINIAL REPAIRS. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFF FOR TESTING AND DISINFECTION.

PERMANENT
CONNECTION DETAILS
SHEET 1 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 164
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

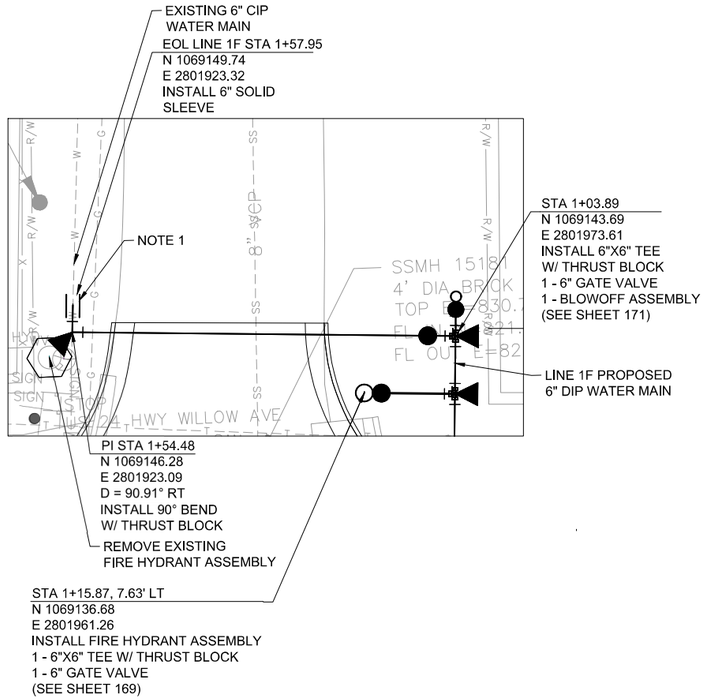
DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

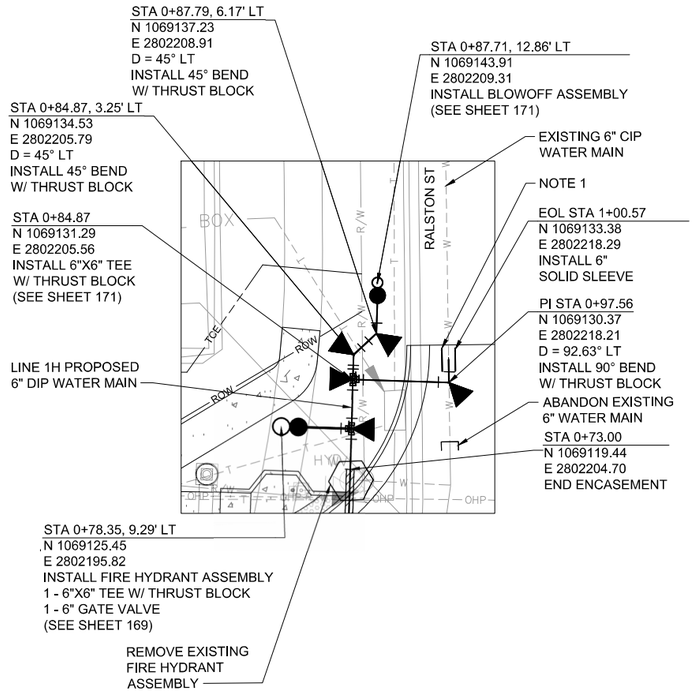
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

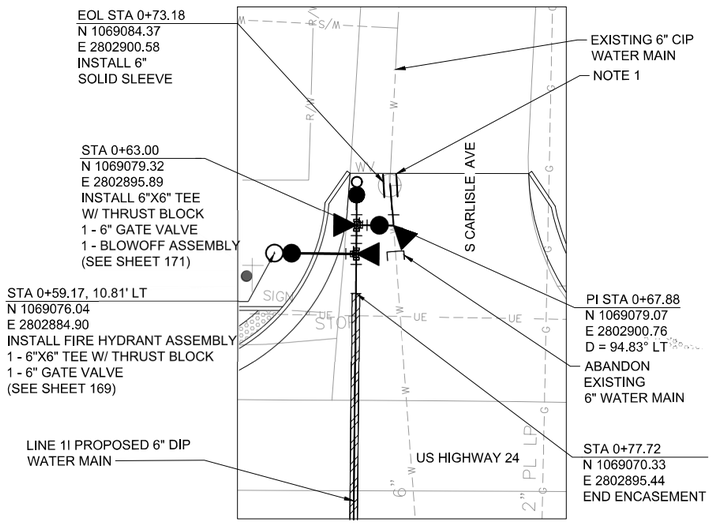
REV. :



LINE 1F PERMANENT CONNECTION DETAIL 4
RESTRAIN ALL JOINTS 160
1" = 10'



LINE 1H PERMANENT CONNECTION DETAIL 5
RESTRAIN ALL JOINTS 161
1" = 10'



LINE 1I PERMANENT CONNECTION DETAIL 6
RESTRAIN ALL JOINTS 161
1" = 10'

NOTES:

1. TIE-IN TO EXISTING MAIN SHALL BE COMPLETED BY I.W.D. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINIAL REPAIRS. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFF FOR TESTING AND DISINFECTION.

PERMANENT
CONNECTION DETAILS
SHEET 2 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 165
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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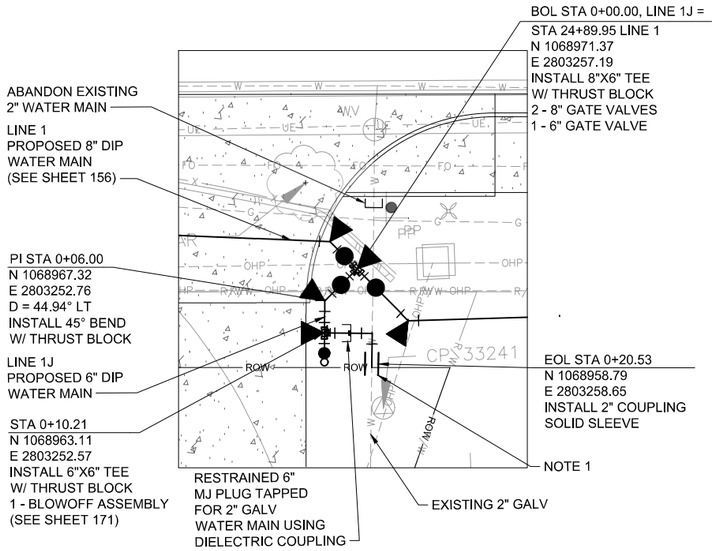
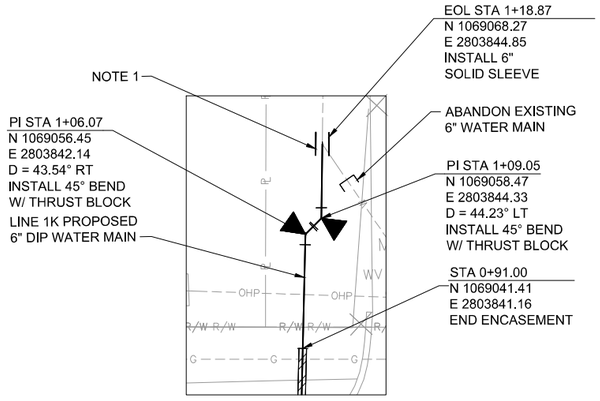
No. : 000165

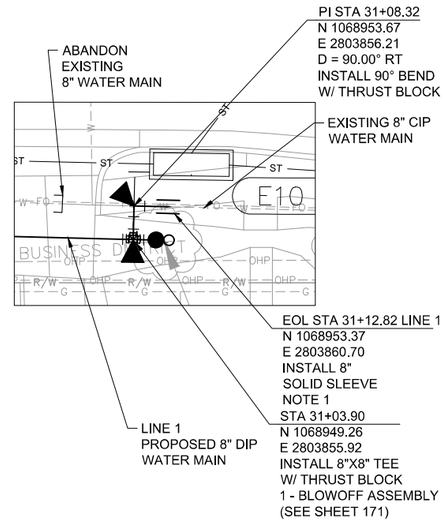
REV. .



LINE 1J PERMANENT CONNECTION DETAIL — 7 / 162
RESTRAIN ALL JOINTS
1" = 10'



EOL LINE 1 AND LINE 1K PERMANENT CONNECTION DETAIL — 8 / 162
RESTRAIN ALL JOINTS
1" = 10'



EOL LINE 1 PERMANENT CONNECTION DETAIL — 9 / 158
RESTRAIN ALL JOINTS
1" = 10'

NOTES:

1. TIE-IN TO EXISTING MAIN WILL BE COMPLETED BY I.W.D. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINIAL REPAIRS. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFF FOR TESTING AND DISINFECTION.

PERMANENT
CONNECTION DETAILS
SHEET 3 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 166
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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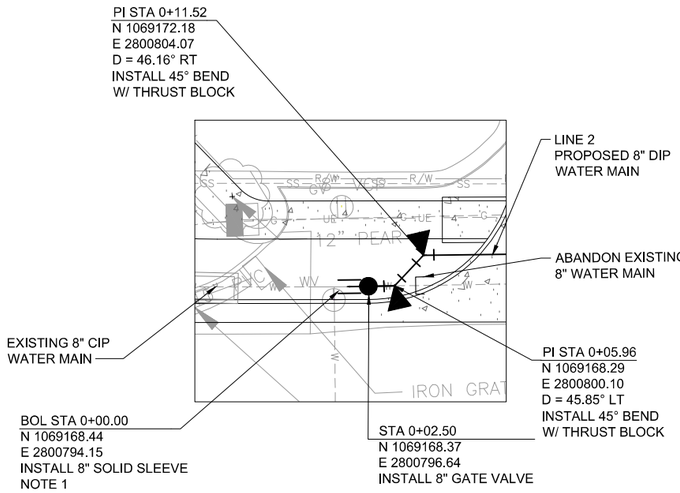
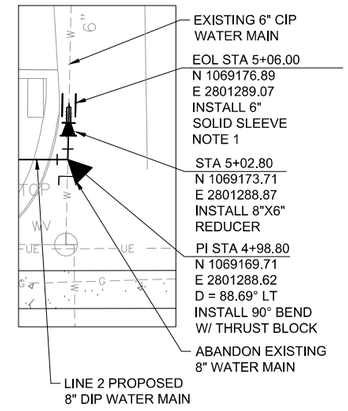
REV.



BOL LINE 2 PERMANENT CONNECTION DETAIL — 10 / 163
RESTRAIN ALL JOINTS
1" = 10'



EOL LINE 2 PERMANENT CONNECTION DETAIL — 11 / 163
RESTRAIN ALL JOINTS
1" = 10'

NOTES:

1. TIE-IN TO EXISTING MAIN WILL BE COMPLETED BY I.W.D. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL, EXCAVATION, BACKFILL, AND FINIAL REPAIRS. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFF FOR TESTING AND DISINFECTION.

PERMANENT
CONNECTION DETAILS
SHEET 4 OF 4

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 167
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

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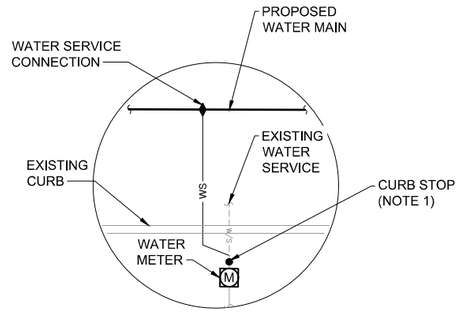
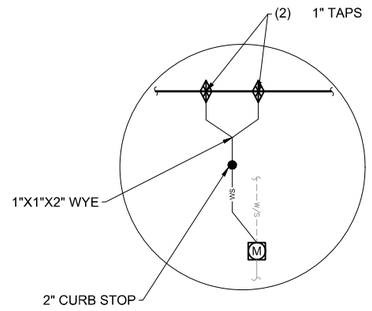
No.: 000165

REV.



TYPICAL SERVICE LINE ≤ 1 1/2"
CONNECTION DETAIL A

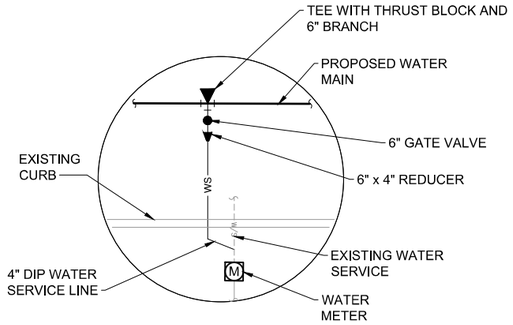
(NOT TO SCALE) STATION VARY



TYPICAL SERVICE LINE > 1 1/2", < 4"
CONNECTION DETAIL E

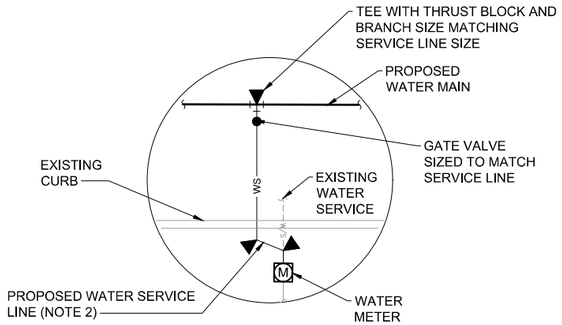
NOTES:

1. CURB STOP LOCATION AND RELOCATED METER LOCATIONS TO BE ESTABLISHED BY INDEPENDENCE WATER DEPARTMENT FIELD INSPECTOR IN FIELD TO AVOID BEING WITHIN DITCH OR ADJACENT TO PAVEMENT.
2. WATER SERVICE LINE TO MATCH "MAIN TO CURB" LINE SIZE IN TRANSFER TABLE.



TYPICAL SERVICE LINE = 4"
CONNECTION DETAIL C

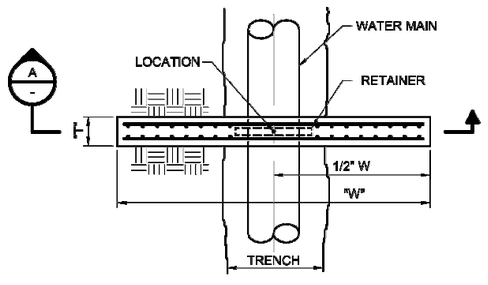
(NOT TO SCALE) STATION VARY
(RESTRAIN THROUGHOUT)



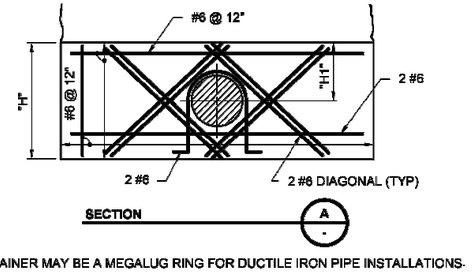
TYPICAL SERVICE LINE ≥ 6"
CONNECTION DETAIL D

(NOT TO SCALE) STATION VARY
(RESTRAIN THROUGHOUT)

STRADDLE BLOCK SCHEDULE				
LINE SIZE	"W"	"H"	"H1"	"T"
6"	6.5'	2'	1'	2.5'
8"	7.67'	2.67'	1.33'	2.67'



PLAN



STRADDLE BLOCK DETAIL
NOT TO SCALE

NOTES:

1. RETAINER MAY BE A MEGALUG RING FOR DUCTILE IRON PIPE INSTALLATIONS.

DETAILS

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 168
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DATE	DESCRIPTION

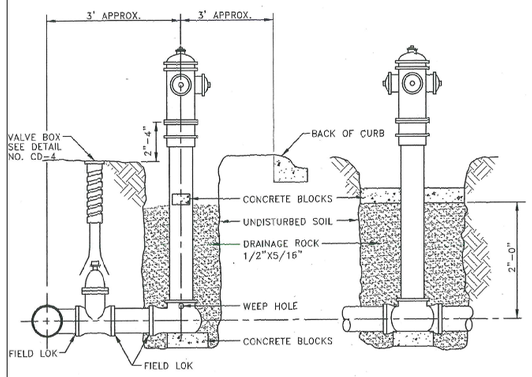
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority
No. : 000165

REV.

INDEPENDENCE WATER DEPARTMENT



NOTES:

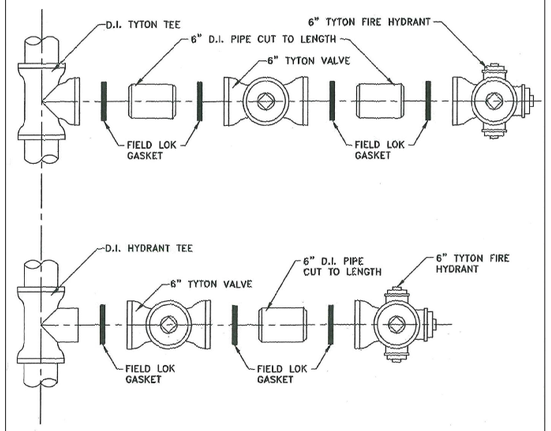
1. HYDRANT LEAD TO BE POLYETHYLENE ENCASED TO HYDRANT SHOE ONLY.

TYPICAL HYDRANT INSTALLATION: STRAIGHT SET

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 1
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-1

INDEPENDENCE WATER DEPARTMENT

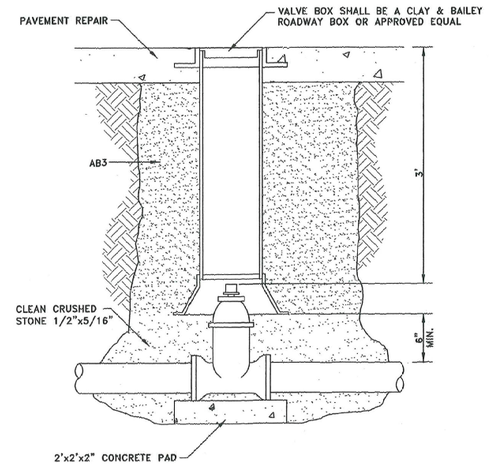


TYPICAL HYDRANT PIPING LAYOUT: STRAIGHT SET

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 2
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-2

INDEPENDENCE WATER DEPARTMENT

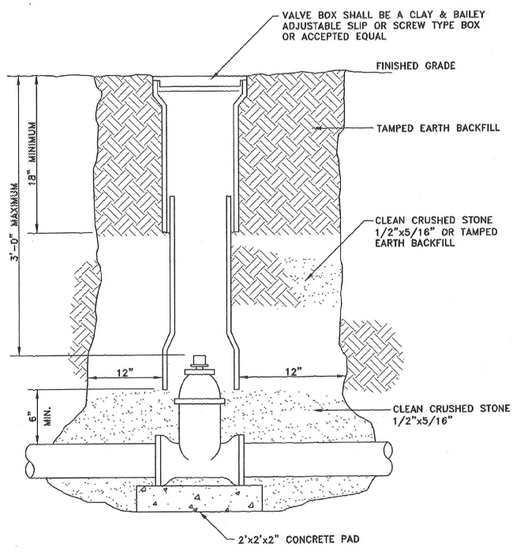


TYPICAL VALVE AND VALVE BOX INSTALLATION - ROADWAY

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 3
APPROVED BY: SH.
DRAWN BY: C.J. DATE: 2/15/02

CD-3

INDEPENDENCE WATER DEPARTMENT

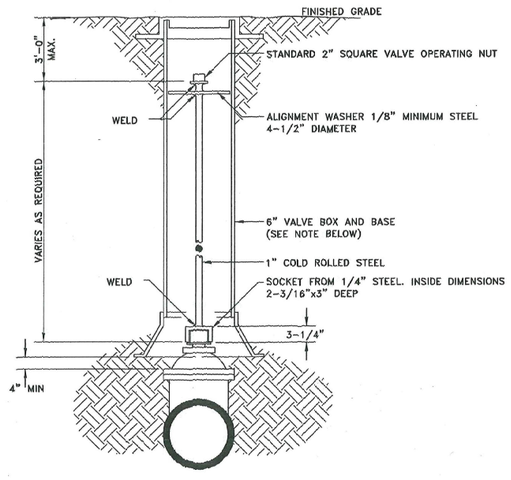


TYPICAL VALVE AND VALVE BOX INSTALLATION

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 4
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-4

INDEPENDENCE WATER DEPARTMENT



NOTE:

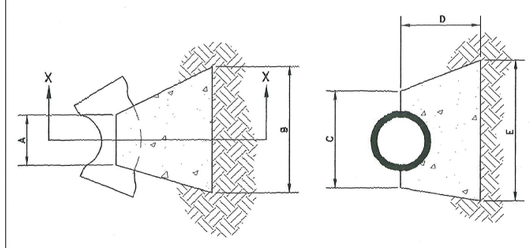
VALVE BOX AND BASE CAN BE ONE PIECE DUCTILE IRON PIPE, AS SPECIFIED IN PARAGRAPH PM-5.01 OR TWO PIECES AS SPECIFIED IN PARAGRAPHS PM-5.01

TYPICAL VALVE STEM EXTENSION

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 5
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-5

INDEPENDENCE WATER DEPARTMENT



NOTES:

1. THRUST BLOCKING DESIGNED FOR A MINIMUM INTERNAL PIPE PRESSURE OF 175 P.S.I. PLUS 50% SURGE.

2. ALL THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH

3. BEARING AREA FOR CONCRETE THRUST BLOCKS ARE ON SOIL HAVING ALLOWABLE SAFE LATERAL BEARING OF ONE (1) TON PER SQUARE FOOT. CALCULATED AREA MUST BE INCREASED FOR SOILS WITH LOWER BEARING CAPACITY

CUBIC YARD OF CONCRETE REQUIRED				
BEND	11-1/4°	22-1/2°	45°	90°
6"	0.2	0.2	0.4	0.7
8"	0.3	0.3	0.7	1.2
12"	0.7	0.7	1.5	2.7

BEND	A	B	C	D	E
6" 11-1/4° & 22-1/2°	8"	18"	8"	24"	18"
6" 45°	8"	30"	8"	24"	30"
6" 90°	8"	36"	8"	24"	36"
8" 11-1/4° & 22-1/2°	10"	24"	10"	24"	24"
8" 45°	10"	36"	10"	24"	36"
8" 90°	10"	48"	10"	24"	48"
12" 11-1/4° & 22-1/2°	14"	36"	14"	24"	36"
12" 45°	14"	54"	14"	24"	54"
12" 90°	14"	72"	14"	24"	72"

TYPICAL THRUST BLOCKING FOR - BENDS

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 6
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-6

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024

ROUTE	STATE
24	MO
DISTRICT	SHEET NO.
KC	169

COUNTY: JACKSON

JOB NO.: JKU0226

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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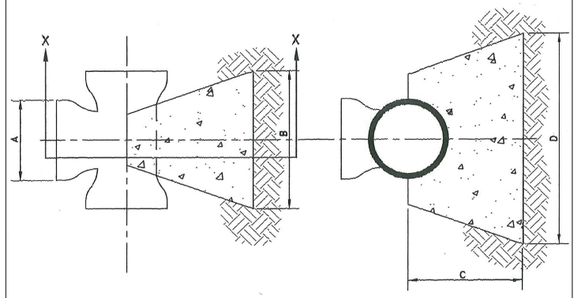
INDEPENDENCE WATER DEPARTMENT



SECTION X-X

NOTES:

1. THRUST BLOCKING DESIGNED FOR A MINIMUM INTERNAL PIPE PRESSURE OF 175 P.S.I. PLUS 50% SURGE.

2. ALL THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH

3. BEARING AREA FOR CONCRETE THRUST BLOCKS ARE ON SOIL HAVING ALLOWABLE SAFE LATERAL BEARING OF ONE (1) TON PER SQUARE FOOT. CALCULATED AREA MUST BE INCREASED FOR SOILS WITH LOWER BEARING CAPACITY

BRANCH SIZE	A	B	C	D
6"	8"	30"	24"	30"
8"	8"	40"	24"	40"
12"	12"	54"	30"	54"

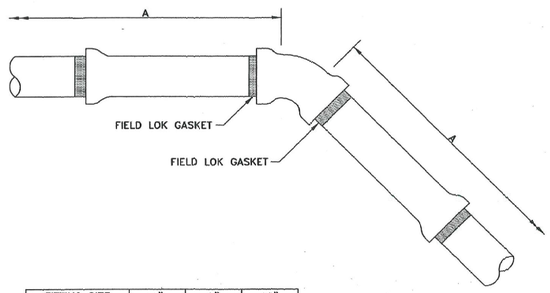
CUBIC YARD OF CONCRETE REQUIRED					
PLUG		TEE			
		RUN	BRANCH		
SIZE	CU. YD.		6"	8"	12"
6"	1	6"	1.0	---	---
8"	1.5	8"	1.5	1.5	---
12"	2	12"	2.0	2.0	2.7

TYPICAL THRUST BLOCKING FOR - TEES

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 7
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-7

INDEPENDENCE WATER DEPARTMENT



FITTING SIZE	6"	8"	12"
BENDS	A	A	A
11-1/4°	11'	14'	21'
22-1/2°	22'	27'	42'
45°	46'	60'	87'
90°	111'	210'	210'

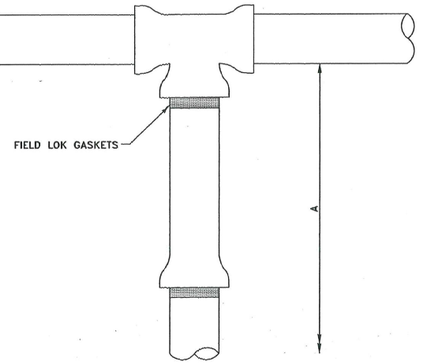
NOTE: RESTRAIN ON EACH SIDE OF FITTING

TYPICAL FIELD LOK GASKET INSTALLATION FOR DUCTILE IRON PIPE - 11-1/4°, 22-1/2°, 45° AND 90° (BENDS)

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 8
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-8

INDEPENDENCE WATER DEPARTMENT



TEE SIZE	BRANCH LINE SIZE 6"	8"	12"
	A	A	A
6"	79'		
8"	78'	105'	
12"	76'	103'	156'

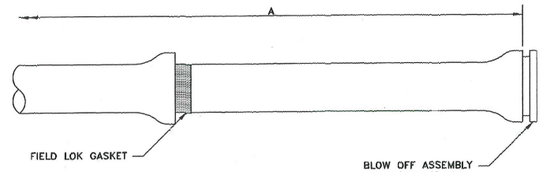
NOTE: TEES ARE TO BE RESTRAINED ON BRANCH ONLY

TYPICAL FIELD LOK GASKET INSTALLATION FOR DUCTILE IRON PIPE - TEES

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 9
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-9

INDEPENDENCE WATER DEPARTMENT

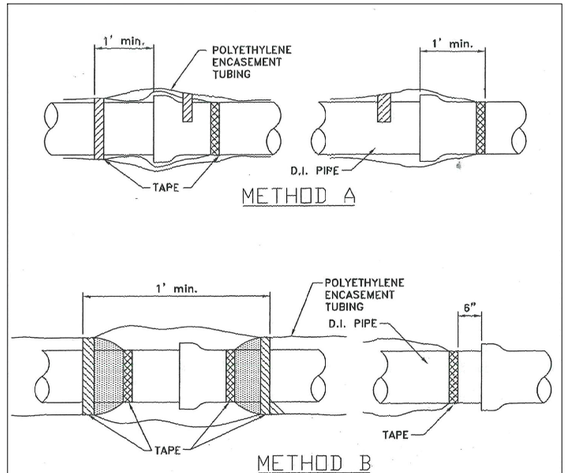


DEAD ENDS			
	A	A	A
6"	83'		
8"		105'	
12"			158'

TYPICAL FIELD LOK GASKET INSTALLATION FOR DUCTILE IRON PIPE - DEAD ENDS

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 10
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-10



POLYETHYLENE ENCASEMENT TUBING TO BE A NATURAL COLOR (CLEAR) WITH AN 8 MIL THICKNESS.

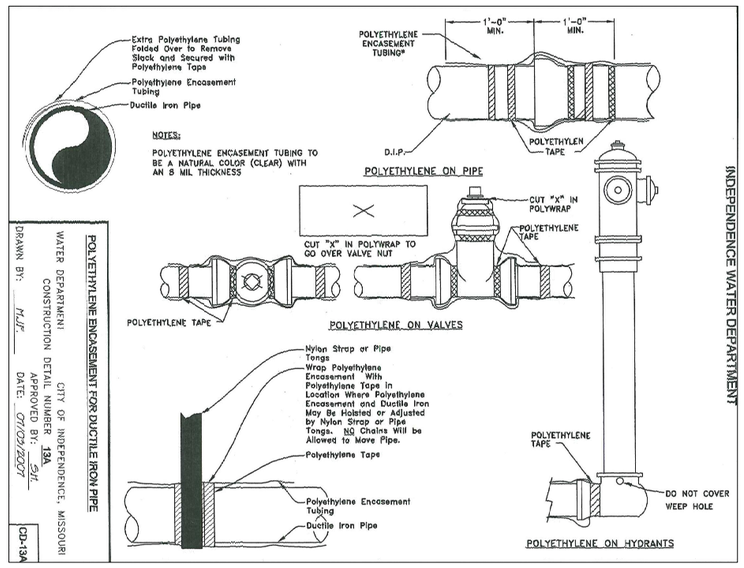
POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE

no scale

POLYETHYLENE ENCASEMENT FOR D.I. PIPE

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 13
APPROVED BY:
DRAWN BY: C.J. DATE: 12/16/04

CD-13



POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 13A
APPROVED BY: SH
DRAWN BY: MJF DATE: 07/03/2007

CD-13A

INDEPENDENCE WATER DEPARTMENT

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 170
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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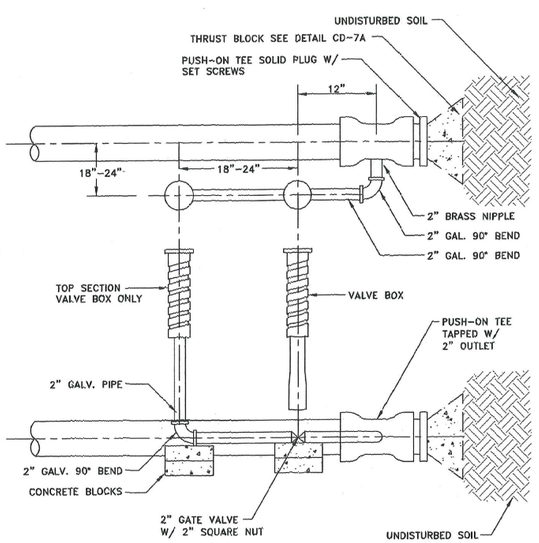
INDEPENDENCE WATER DEPARTMENT



NOTE:
THRUST BLOCK TO BE USED IF FIELD LOK GASKETS ARE NOT USED. SEE DETAILS FOR CONCRETE BLOCK AND FIELD LOK GASKETS

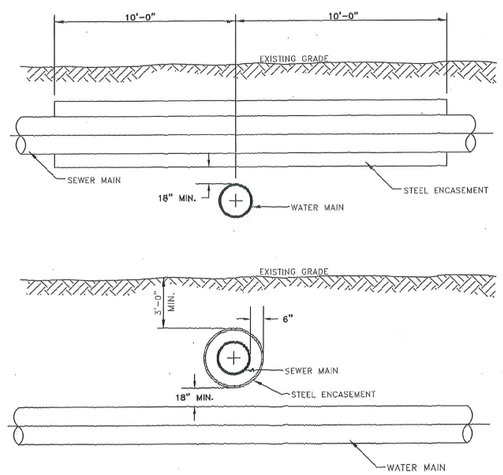
DO NOT CUT NOTCH IN 2" GALV. 90° BEND

TYPICAL BLOW OFF ASSEMBLY - DEAD END

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 14
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-14

INDEPENDENCE WATER DEPARTMENT



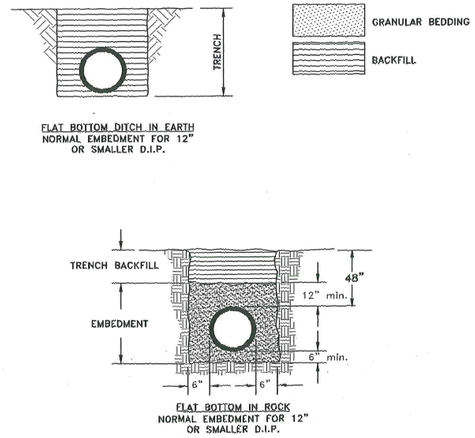
Note: Concrete Encasement is no longer an acceptable encasement - per MODNR Dec. 10, 2013, Section 8.6 Separation of Water Mains and Sewers

TYPICAL SANITARY OR STORM SEWER MAIN CROSSING WATER MAIN

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 18
APPROVED BY: SH
DRAWN BY: CJ DATE: 12/9/2014

CD-18

INDEPENDENCE WATER DEPARTMENT

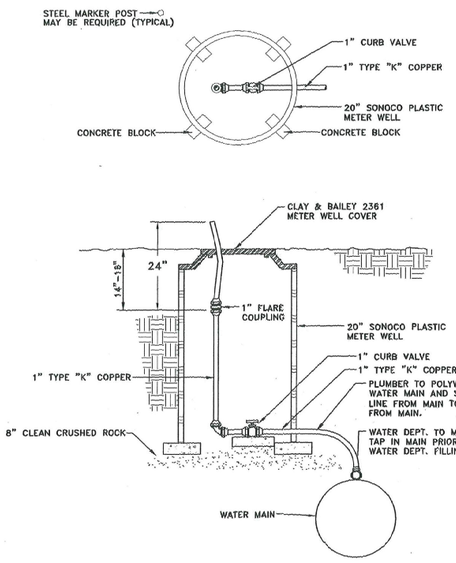


STANDARD LAYING CONDITIONS FOR DUCTILE IRON PIPE

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 19
APPROVED BY: RV.
DRAWN BY: CJ DATE: 01/20/2011

CD-19

INDEPENDENCE WATER DEPARTMENT

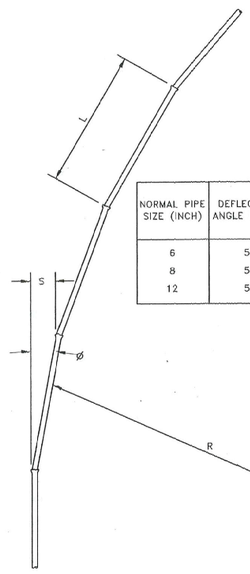


TYPICAL AIR RELEASE PIT

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 20
APPROVED BY: DR.
DRAWN BY: SDH. DATE: 01/03/2007

CD-20

INDEPENDENCE WATER DEPARTMENT



NORMAL PIPE SIZE (INCH)	DEFLECTION ANGLE (DEG.)	MAXIMUM OFFSET (INCH)	APPROX. RADIUS OF CURVE PRODUCT BY SUCCESSION OF JOINTS (FEET)
		18 FEET (L)	18 FEET (L)
6	5	19	205
8	5	19	205
12	5	19	205

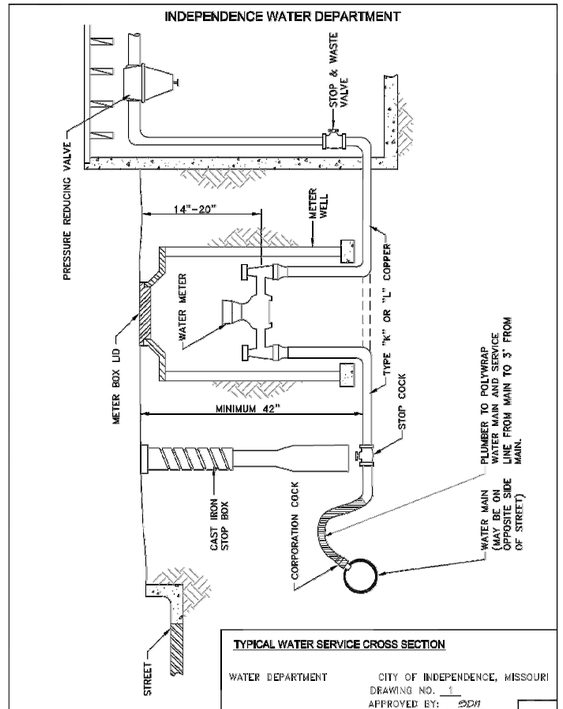
Ø = DEFLECTION ANGLE
S = JOINT DEFLECTION OFFSET
L = LAYING LENGTH
R = RADIUS OF CURVE
$R = \frac{L}{2 \tan Ø/2}$

JOINT DEFLECTION FOR DUCTILE IRON PIPE

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 21
APPROVED BY: RV.
DRAWN BY: SDH. DATE: 3/20/89

CD-21

INDEPENDENCE WATER DEPARTMENT



*SUBJECT TO REVISION WITHOUT NOTICE

TYPICAL WATER SERVICE CROSS SECTION

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
DRAWING NO. 1
APPROVED BY: SDH
DRAWN BY: CJ DATE: 12/18/17

1

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED
1 / 18 / 2024

ROUTE 24 | STATE MO
DISTRICT KC | SHEET NO. 171
COUNTY JACKSON
JOB NO. JKU0226
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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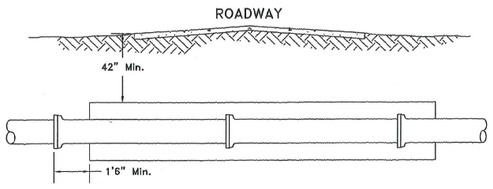
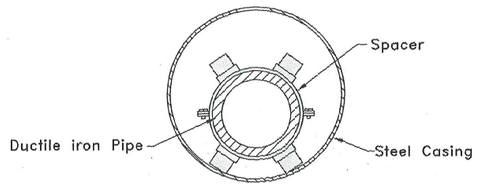
INDEPENDENCE WATER DEPARTMENT



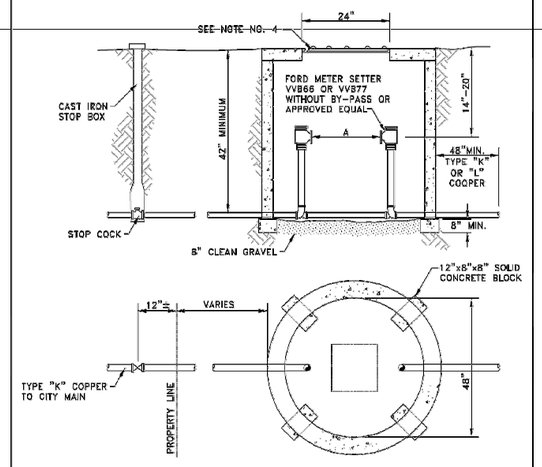


NOTES:
1. POLYETHYLENE ENCASEMENT SHALL BE INSTALLED ON ALL DUCTILE IRON PIPE AND FITTINGS INCLUDING DUCTILE IRON PIPE WHICH IS IN ENCASEMENT.
2. ENCASEMENT SHALL BE INSTALLED PER RAILROAD AND/OR HIGHWAY SPECIFICATIONS.
3. ALL PIPE IN CASING WILL BE FIELD LOCKED.
4. SEE DETAIL CD-12A FOR ADDITIONAL DETAIL AND NOTES.

TYPICAL ENCASEMENT UNDER ROADWAY FOR DUCTILE IRON PIPE-6" THRU 36"

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 11
APPROVED BY: SDH
DRAWN BY: CJ DATE: 9/21/11 CD-11

INDEPENDENCE WATER DEPARTMENT



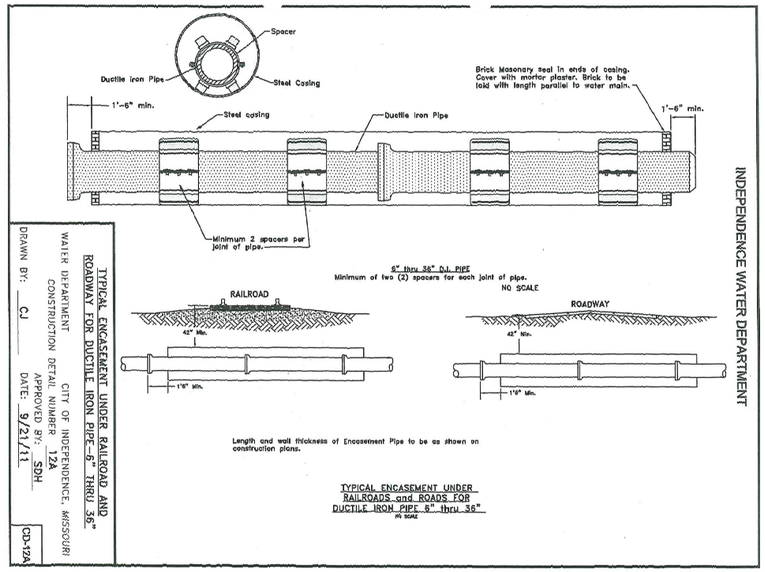
NOTES:
1. METER VAULT TO BE LOCATED OUTSIDE TRAFFIC AREA AND WHERE SURFACE WATER WILL NOT DRAIN INTO IT. VAULT MUST BE KEPT FREE OF WATER.
2. METER SETTER MUST BE USED WITH THIS VAULT. (FORD VB66 OR VB77 OR APPROVED EQUAL WITHOUT BYPASS)
3. VAULT MUST BE DESIGNED AND MAINTAINED FOR PROPER DRAINAGE.
4. BILCO "K" SINGLE LEAF ALUMINUM, CLAY & BAILEY 2213 OR APPROVED EQUAL.
5. METER VAULT TO BE PRECAST CONCRETE.
6. ADAPTERS WILL BE REQUIRED FOR METERS SMALLER THAN SERVICE LINE SIZE.

METER SIZE	A
1-1/2"	13"
2"	17"

*SUBJECT TO REVISION WITHOUT NOTICE

METER VAULT FOR 1-1/2" AND 2" SERVICE LINES IN NON-TRAFFIC AREAS

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
DRAWING NO. 3-A
APPROVED BY: SDH
DRAWN BY: CJ DATE: 12/18/17 3-A



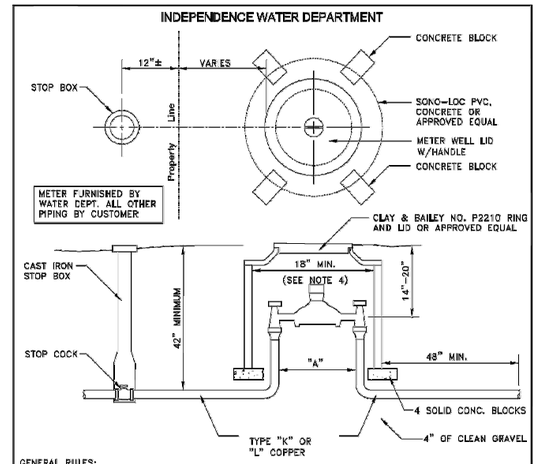
TYPICAL ENCASEMENT UNDER RAILROADS AND ROADS FOR DUCTILE IRON PIPE 6" thru 36"
NO SCALE

TYPICAL ENCASEMENT UNDER RAILROAD AND ROADWAY FOR DUCTILE IRON PIPE-6" THRU 36"

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 12A
APPROVED BY: SDH
DRAWN BY: CJ DATE: 9/21/11 CD-12A

INDEPENDENCE WATER DEPARTMENT

INDEPENDENCE WATER DEPARTMENT



GENERAL RULES:
1. METER PIT TO BE LOCATED OUTSIDE TRAFFIC AREA WHERE SURFACE WATER WILL NOT DRAIN INTO IT.
2. ALL FITTINGS TO BE BRASS OR COPPER.
3. WHEN SERVING MULTI-LEVEL STRUCTURE, SHUT OFF IS REQUIRED ON BOTH SIDES OF METER.
4. FOR 1" SERVICE USE 24" DIAMETER WELL WITH CLAY & BAILEY 2424 ADAPTER & P2210 RING & LID.
5. METER WELL TO BE SET ON 4" GRAVEL BEDDING.

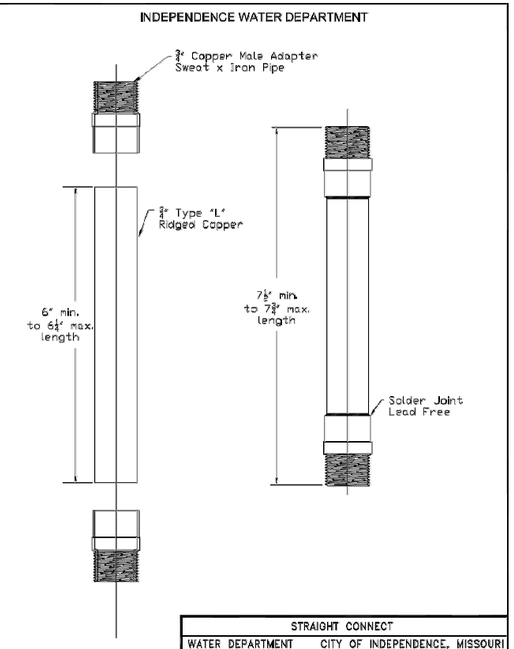
METER SIZE	DIMENSION "A"
5/8"	12 1/4"
3/4"	13 7/8"
1"	16 5/8"

*SUBJECT TO REVISION WITHOUT NOTICE

METER BOX FOR 3/4", 1" AND 1-1/4" SERVICE LINES

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
DRAWING NO. 2
APPROVED BY: SDH
DRAWN BY: CJ DATE: 12/18/17 2

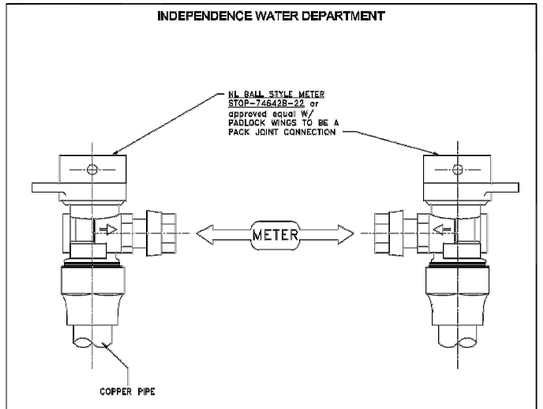
INDEPENDENCE WATER DEPARTMENT



STRAIGHT CONNECT

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NO. 2-B
Drawn by CJ Approved by SDH Date 4-28-2011 2-B

INDEPENDENCE WATER DEPARTMENT



METER SET FOR 3/4", 1" AND 1-1/4" SERVICE LINES

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
DRAWING NO. 2-A
APPROVED BY: SDH
DRAWN BY: CJ DATE: 12/18/2017 2-A

*SUBJECT TO REVISION WITHOUT NOTICE

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 172
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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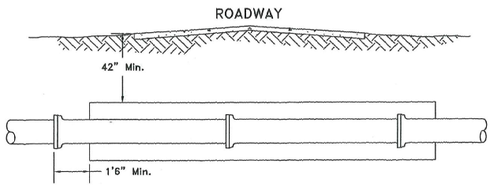
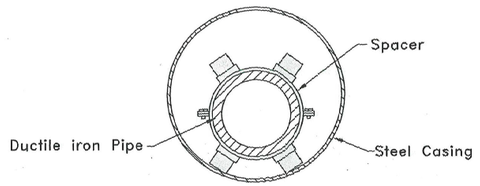
INDEPENDENCE WATER DEPARTMENT



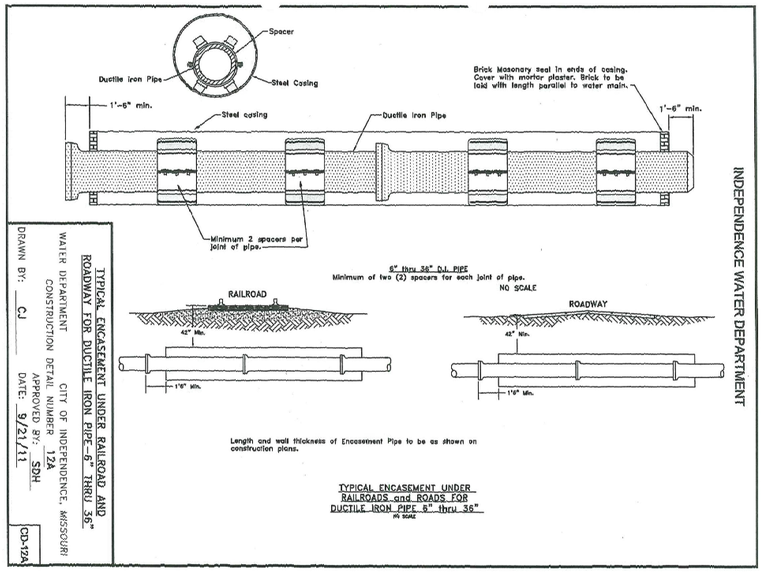


NOTES:
1. POLYETHYLENE ENCASEMENT SHALL BE INSTALLED ON ALL DUCTILE IRON PIPE AND FITTINGS INCLUDING DUCTILE IRON PIPE WHICH IS IN ENCASEMENT.
2. ENCASEMENT SHALL BE INSTALLED PER RAILROAD AND/OR HIGHWAY SPECIFICATIONS.
3. ALL PIPE IN CASING WILL BE FIELD LOCKED.
4. SEE DETAIL CD-12A FOR ADDITIONAL DETAIL AND NOTES.

TYPICAL ENCASEMENT UNDER ROADWAY FOR DUCTILE IRON PIPE-6" THRU 36"

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 11
APPROVED BY: SDH
DRAWN BY: CJ DATE: 9/21/11 CD-11

INDEPENDENCE WATER DEPARTMENT

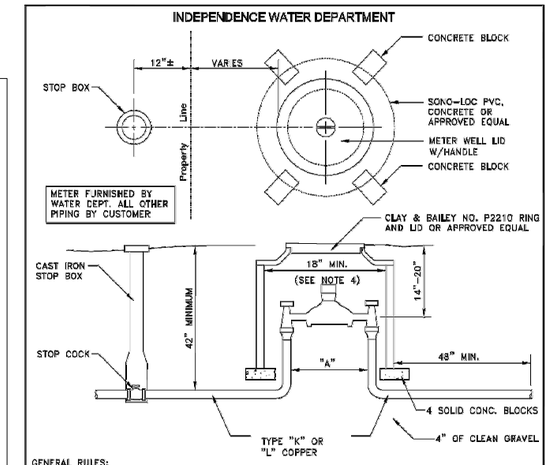


TYPICAL ENCASEMENT UNDER RAILROADS AND ROADS FOR DUCTILE IRON PIPE 6" thru 36"
NO SCALE

TYPICAL ENCASEMENT UNDER RAILROAD AND ROADWAY FOR DUCTILE IRON PIPE-6" THRU 36"

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NUMBER 12A
APPROVED BY: SDH
DRAWN BY: CJ DATE: 9/21/11 CD-12A

INDEPENDENCE WATER DEPARTMENT



GENERAL RULES:

1. METER PIT TO BE LOCATED OUTSIDE TRAFFIC AREA WHERE SURFACE WATER WILL NOT DRAIN INTO IT.
2. ALL FITTINGS TO BE BRASS OR COPPER.
3. WHEN SERVING MULTI-LEVEL STRUCTURE, SHUT OFF IS REQUIRED ON BOTH SIDES OF METER.
4. FOR 1" SERVICE USE 24" DIAMETER WELL WITH CLAY & BAILEY 2424 ADAPTER & P2210 RING & LID.
5. METER WELL TO BE SET ON 4" GRAVEL BEDDING.

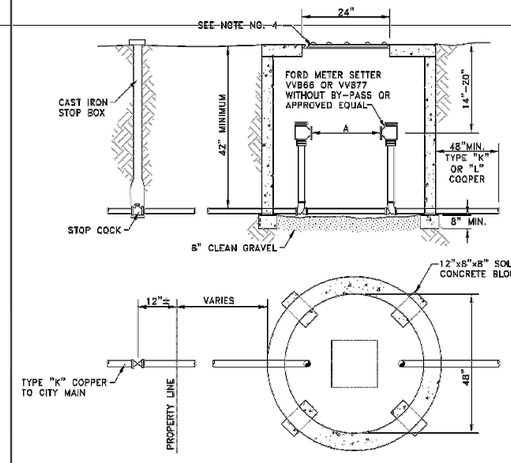
METER SIZE	DIMENSION "A"
5/8"	12 1/4"
3/4"	13 7/8"
1"	16 5/8"

*SUBJECT TO REVISION WITHOUT NOTICE

METER BOX FOR 3/4", 1" AND 1-1/4" SERVICE LINES

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
DRAWING NO. 2
APPROVED BY: SDH
DRAWN BY: CJ DATE: 12/18/17 2

INDEPENDENCE WATER DEPARTMENT



NOTES:

1. METER VAULT TO BE LOCATED OUTSIDE TRAFFIC AREA AND WHERE SURFACE WATER WILL NOT DRAIN INTO IT. VAULT MUST BE KEPT FREE OF WATER.
2. METER SETTER MUST BE USED WITH THIS VAULT. (FORD VB66 OR VB77 OR APPROVED EQUAL WITHOUT BYPASS)
3. VAULT MUST BE DESIGNED AND MAINTAINED FOR PROPER DRAINAGE.
4. BILCO "K" SINGLE LEAF ALUMINUM, CLAY & BAILEY 2213 OR APPROVED EQUAL.
5. METER VAULT TO BE PRECAST CONCRETE.
6. ADAPTERS WILL BE REQUIRED FOR METERS SMALLER THAN SERVICE LINE SIZE.

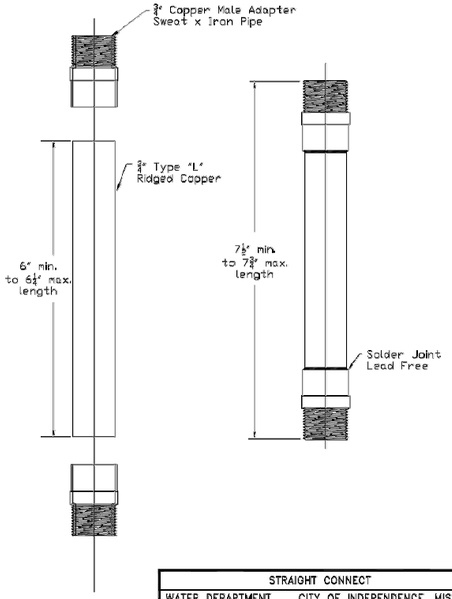
METER SIZE	A
1-1/2"	13"
2"	17"

*SUBJECT TO REVISION WITHOUT NOTICE

METER VAULT FOR 1-1/2" AND 2" SERVICE LINES IN NON-TRAFFIC AREAS

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
DRAWING NO. 3-A
APPROVED BY: SDH
DRAWN BY: CJ DATE: 12/18/17 3-A

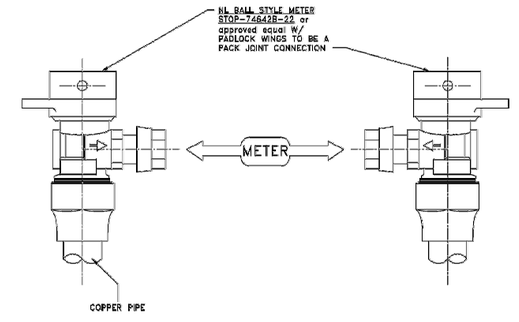
INDEPENDENCE WATER DEPARTMENT



STRAIGHT CONNECT

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
CONSTRUCTION DETAIL NO. 2-B
Drawn by CJ Approved by SDH Date 4-28-2011 2-B

INDEPENDENCE WATER DEPARTMENT



METER SET FOR 3/4", 1" AND 1-1/4" SERVICE LINES

WATER DEPARTMENT CITY OF INDEPENDENCE, MISSOURI
DRAWING NO. 2-A
APPROVED BY: SDH
DRAWN BY: CJ DATE: 12/18/2017 2-A

*SUBJECT TO REVISION WITHOUT NOTICE

STATE OF MISSOURI
RONNIE L. WILLIAMS
NUMBER PE-2010000879
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY

DATE PREPARED: 1 / 18 / 2024
ROUTE: 24 | STATE: MO
DISTRICT: KC | SHEET NO.: 173
COUNTY: JACKSON
JOB NO.: JKU0226
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

BURNS McDONNELL
9400 Ward Parkway
Kansas City, MO 64114
(816) 333-9400
Certificate of Authority No.: 000165

REV.

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