ADRIAN

OLD RTE 71 A.A.D.T. - 2023 = 555V = 35 M.P.H. FUNCTIONAL CLASSIFICATION - LOCAL

ADRIAN

A.A.D.T. - 2023 = 1541 V = 25 M.P.H. FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR

BUTLER

BU LOOP 49 A.A.D.T. - 2023 = 7600 V = 35 M.P.H. FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR

BUTLER

RTE 52 A.A.D.T. - 2023 = 7183 V = 45 M.P.H. FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR

NO NEW R/W REQUIRED

CONVENTIONAL SYMBOLS

(OSED IN FERMS	• •	
	EXISTING	NE W
BUILDINGS AND STRUCTURES GUARD RAIL GUARD CABLE CONCRETE RIGHT-OF-WAY MARKER STEEL RIGHT-OF-WAY MARKER LOCATION SURVEY MARKER	0000	••••
UTILITIES		0
FIBER OPTICS OVERHEAD CABLE TV	− F O − − O T V −	
UNDERGROUND CABLE TV	-UTV-	-UTV
OVERHEAD TELEPHONE	– OT – – UT –	-0T-
UNDERGROUND TELEPHONE OVERHEAD POWER	- OE -	-0E-
UNDERGROUND POWER	– UE –	-UE-
SANITARY SEWER STORM SEWER	—s— -ss-	S
GAS	-G-	-6-
WATER	— W — SAN	—₩—
MANHOLE	D'''C	€
FIRE HYDRANT]
WATER VALVE	wv_c	€
WATER METER	₩₩	€
DROP INLET	"[
DITCH BLOCK	=	=
GROUND MOUNTED SIGN	SIGN	-
LIGHT POLE	I	
H-FRAME POWER POLE		
TELEPHONE PEDESTAL FENCE	PED _	7
CHAIN LINK WOVEN WIRE		, ——
GATE POST	— <i>)</i>	(—— 3
BENCHMARK	ВМ	– እ
""""	~	y

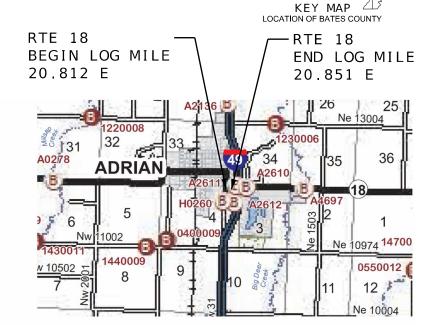
NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

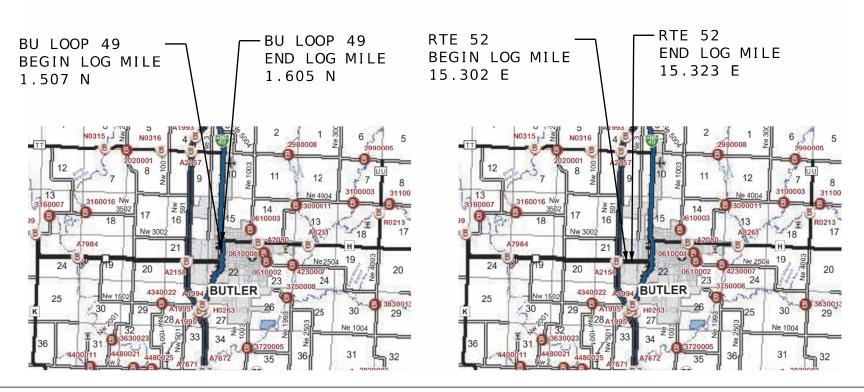
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED STATE HIGHWAY

BATES 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
TITLE SHEET	1
TYPICAL SECTIONS (TS) (6 SHEETS)	2
QUANTITIES (QU) (2 SHEETS)	3
PLAN (PL)	4-7
TRAFFIC CONTROL SHEETS (TC)	8-10
SIGNAL SHEETS (SG)	11-15

THIRITIAN .	T SIGN	PE SS,	NUN -20°	MBEI 1802 AL 1111 T HA DNIC	P 1231 FN ND E ALLY.	DATE	HITTING TO STATE OF THE STATE O
	3	DAT	Е РГ . 8 ј			4	
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		J7	_{ЮВ}	35	11		
		CON				•	
		PRO) JE	CT ·	NO.		
		BR	IDG	E 1	1O.		
NO							

LENGTH OF PROJECT

BEGINNING OF OLD RTE 71	LOG MILE - 0.213 S
END OF OLD RTE 71	LOG MILE - 0.234 S
APPARENT LENGTH	110.88 FEET
BEGINNING OF RTE 18	LOG MILE - 20.812 E
END OF RTE 18	LOG MILE - 20.851 E
APPARENT LENGTH	205.92 FEET
BEGINNING OF BU LOOP 49	LOG MILE - 1.507 N
END OF DU LOOD 40	1.00 MUE 1.00E N

END OF BU LOOP 49	LUG MILE - 1.605 N
APPARENT LENGTH	517.44 FEET
BEGINNING OF RTE 52	LOG MILE - 15.302 E
END OF RTE 52	LOG MILE - 15.323 E
APPARENT LENGTH	110.88 FFFT

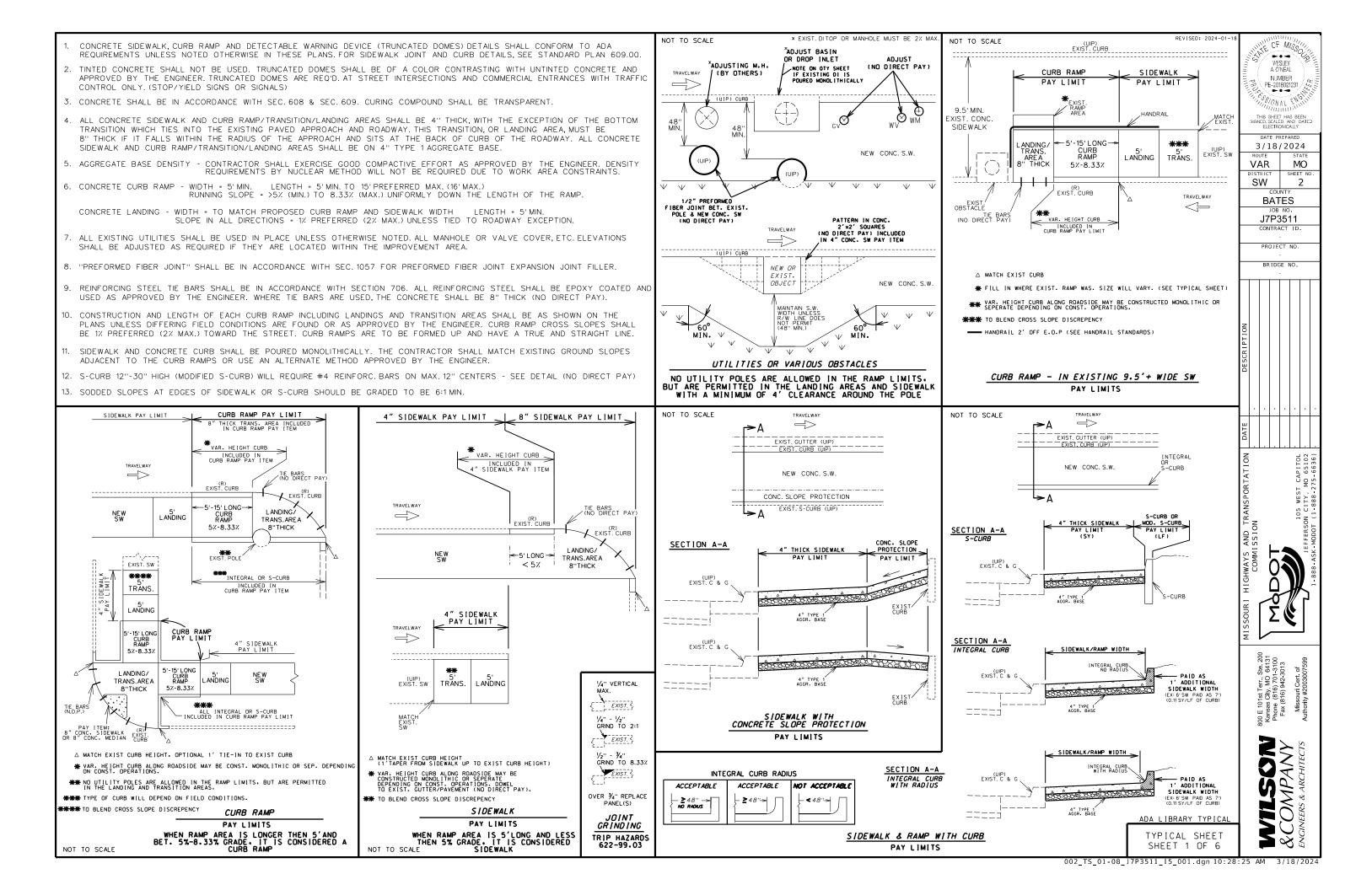
EQUATIONS AND EXCEPTIONS: NONE

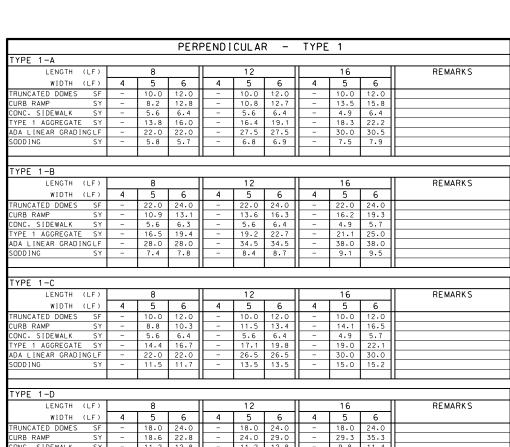
	TOTAL CORRECTIONS	0.00 FEET
	NET LENGTH OF PROJECT	945.12 FEET
}	STATE LENGTH	0.179 MILES
	FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	0.1 ACRES

800 E 101st Terr.. Ste. 200 Kansas City, MO 64131 Phone (816) 701-3100 Fax (816) 942-3013



0.1 ACRES

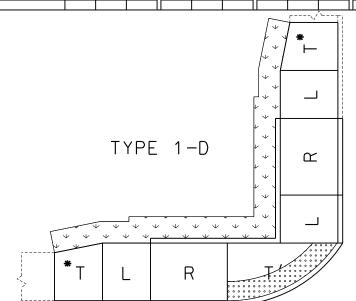


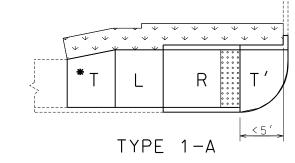


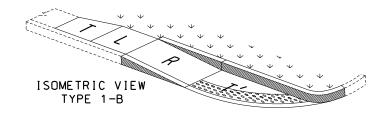
LENGTH (LF)		8			12			16		REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	18.0	24.0	-	18.0	24.0	-	18.0	24.0	
CURB RAMP SY	-	18.6	22.8	-	24.0	29.0	-	29.3	35.3	
CONC. SIDEWALK SY	-	11.2	12.8	-	11.2	12.8	-	9.8	11.4	
TYPE 1 AGGREGATE SY	-	29.8	35.6	-	35.2	41.8	-	39.1	46.7	
ADA LINEAR GRADINGLF	-	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	

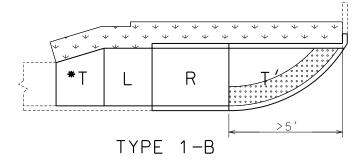
TYPE 1-E										
LENGTH (LF)		8			12			16		REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	18.0	24.0	-	18.0	24.0	-	18.0	24.0	
CURB RAMP SY	-	14.8	19.0	-	20.1	25.2	-	25.5	31.4	
CONC. SIDEWALK SY	-	11.2	12.8	-	11.2	12.8	-	9.8	11.4	
TYPE 1 AGGREGATE SY	-	26.0	31.8	-	31.3	38.0	-	35.3	42.8	
ADA LINEAR GRADINGLF	-	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	

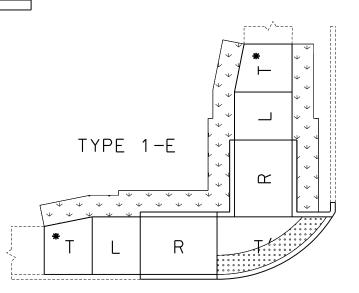
TYPE 1-F										-
LENGTH (LF)		8			12			16		REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	-	14.0	16.0	-	14.0	16.0	-	14.0	16.0	
CURB RAMP SY	_	15.5	19.0	_	20.8	25.2	-	26.2	31.4	
CONC. SIDEWALK SY	-	11.2	12.8	-	11.2	12.8	-	9.8	11.4	
TYPE 1 AGGREGATE SY	-	26.7	31.8	-	32.0	38.0	-	36.0	42.8	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

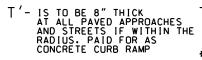












T - TRANSITION TO EXISTING SW OR PAVED APPROACH (LANDING PREFERED AT PAVED APPROACH IF CONDITIONS ALLOW)

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

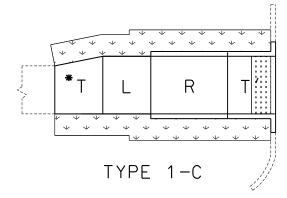
R - RAMP

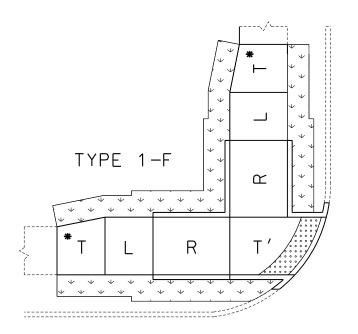
- CURB RAMP PAY LIMITS

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

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

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





ADA LIBRARY TYPICAL

TYPE 1

PERPENDICULAR CURB RAMPS

TYPICAL SHEET 2 OF 6

CF MISSO WESLEY A. O'NEAL NUMBER NUMBER PE-2018021231

REVISED: 2022-05-18

THIS SHEET HAS BEEN SIGNED, SEALED AND DATES ELECTRONICALLY.

3/18/2024 VAR МО SHEET NO 2 SW

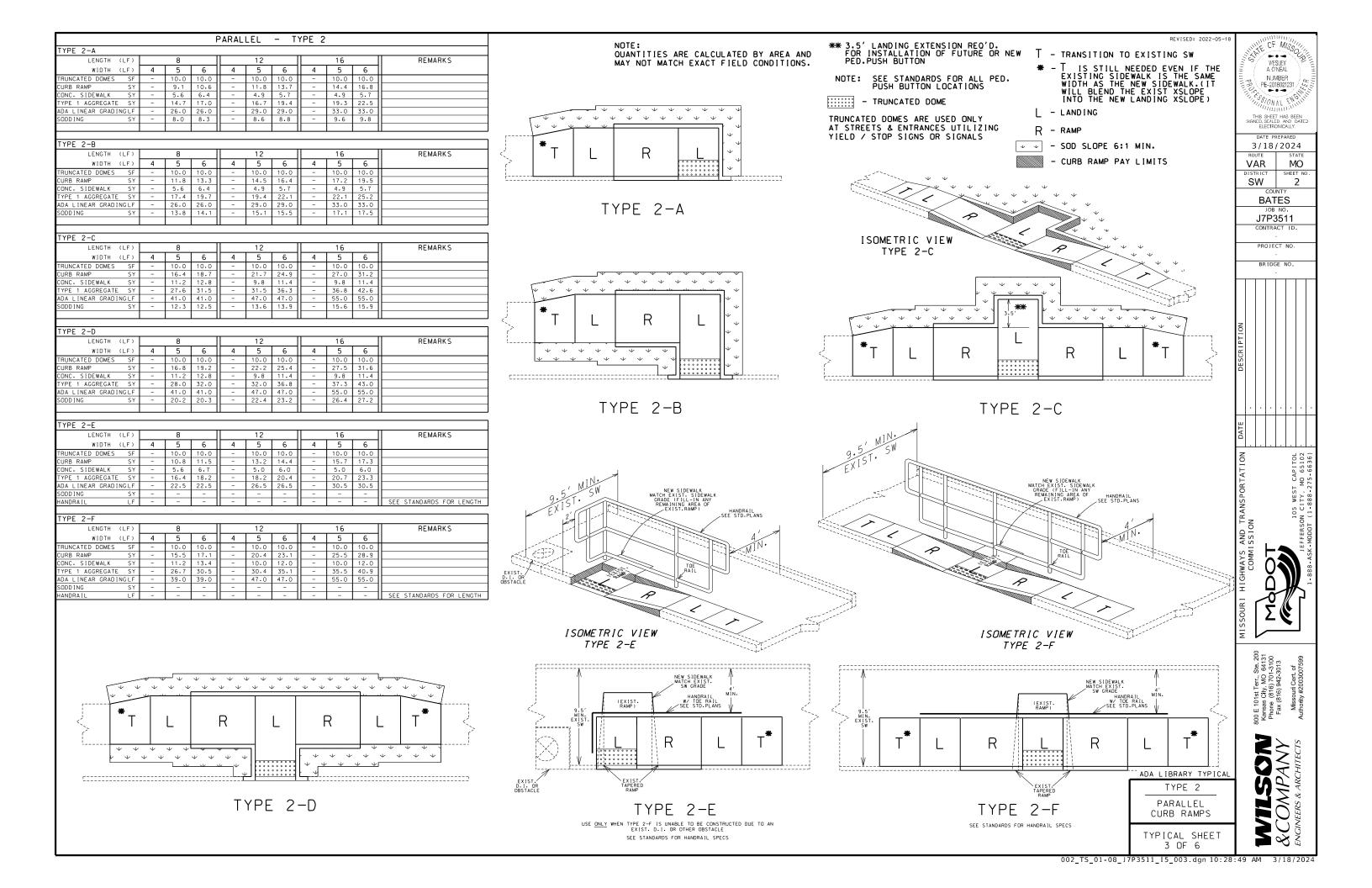
BATES J7P3511

PROJECT NO.

BRIDGE NO.

800 E 101st Terr., Ste. 200 Kansas City, MO 64131 Phone (816) 701-3100 Fax (816) 942-3013

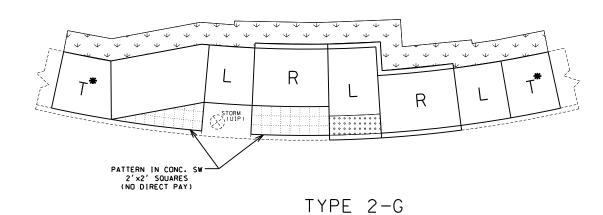
205



PARALLEL - TYPE 2 (cont'd.)													
TYPE 2-G													
LENGTH (LF)		8				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 GRADINGLF	-	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)					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 GRADINGLF	-	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	

ISOMETRIC VIEW TYPE 2-G



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

REVISED: 2022-05-18

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.

3/18/2024

BATES

JOB NO.
J7P3511
CONTRACT ID.

PROJECT NO BRIDGE NO.

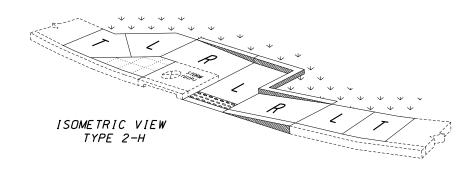
МО SHEET NO

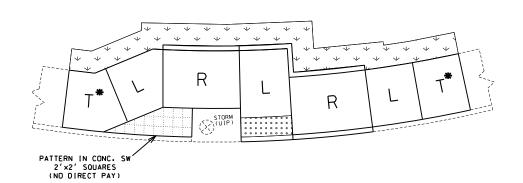
2

VAR

SW

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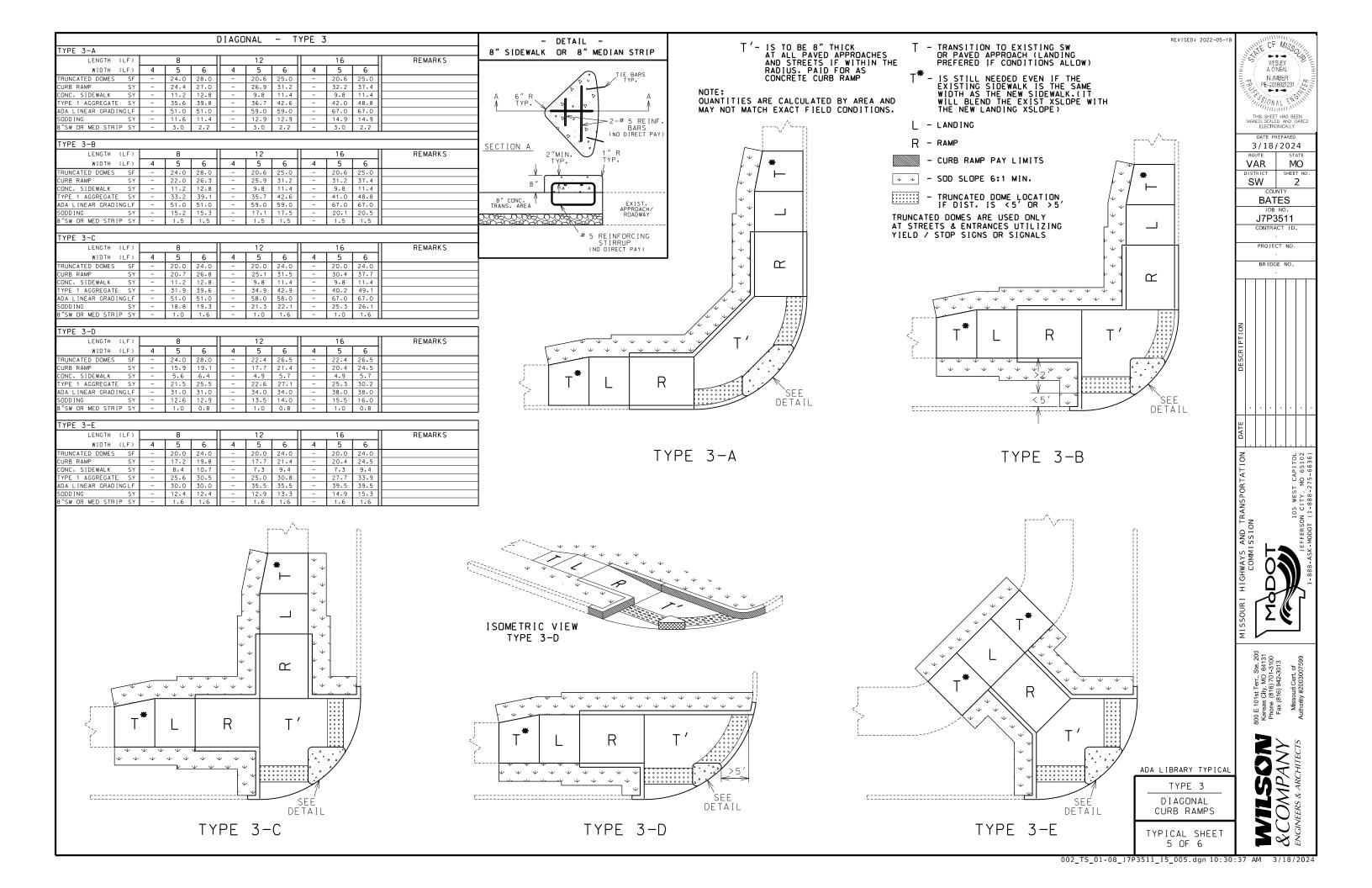


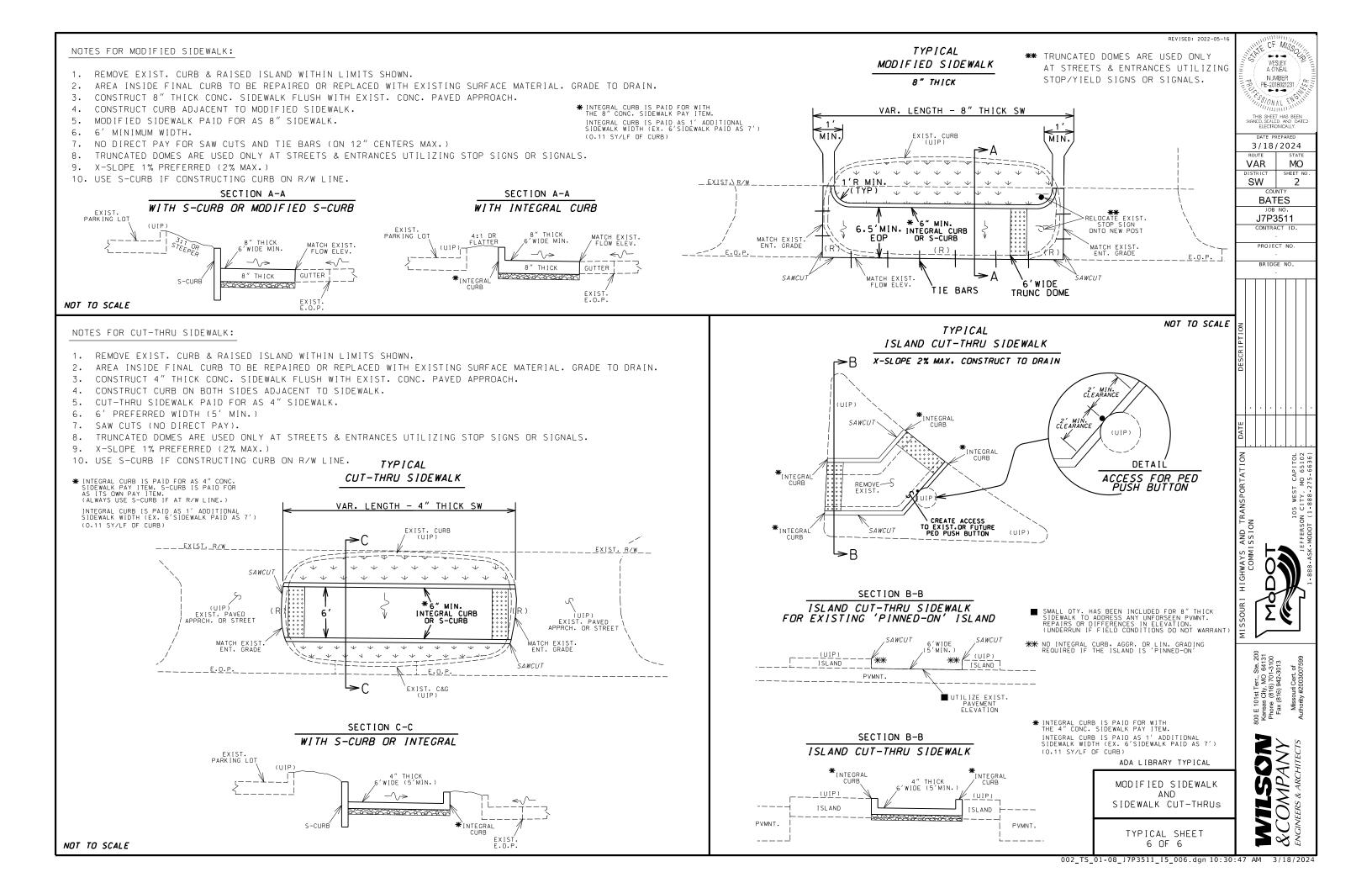
TYPE 2-H

ADA LIBRARY TYPICAL

TYPE 2 PARALLEL CURB RAMPS

TYPICAL SHEET 4 OF 6





MOBILIZATION - 1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING AND STAKING -1 LUMP SUM

CLEARING AND GRUBBING AT NO DIRECT PAY

						CONCRET	E SIDEW	ALK				
					CONC CU RA	RB		CONCRETE SIDEWALK 4"	TRUNCATED DOMES	4" TYPE 1 AGG BASE	ADA LINEAR GRADING CLASS 1	
SHEET	L	OCATIC	N	LENGTH WIDTH TYPE SY			(SY)	(SF)	(SY)	(STA)	REMARKS	
4	OLD RTE 71 & RTE 18		ADRIAN					137.0	36.0	137.0	2.0	
5	LOOP 49	NW	BUTLER	6.5	5.0	3-C	6.6	10.2	20.0	14.7	0.1	
5	LOOP 49	SW	BUTLER	5.0	6.0	1-B	3.2	7.9	13.0	11.1	0.1	
5	LOOP 49	SW	BUTLER	6.0	5.0	1-C	3.6	2.2	10.0	5.8	0.1	
5	LOOP 49	NE	BUTLER	10.0	5.0	1-A	7.4	2.4	10.0	7.4	0.1	
5	LOOP 49	SE	BUTLER	9.5	5.0	1-A	3.7	2.8	10.0	6.5	0.1	
6	LOOP 49	NW	BUTLER	5.0	5.0	1-C	3.3	7.5	10.0	6.1	0.1	
6	LOOP 49	SW	BUTLER	4.0	5.0	1-C	2.2	7.8	10.0	5.0		
6	LOOP 49	NE	BUTLER	9.0	5.0	1-C	6.1	3.6	10.0	9.7	0.1	
6	LOOP 49	SE	BUTLER	13.0	5.0	1-C	8.5	5.3	10.0	11.3	0.1	
			TOTAL				44.7	186.6	139.0	231.3	2.8	
			USE				44.7	100.0	135.0	231.3	2.0	

	SODDING										
		SODDING									
SHEET	LOCATION	(SY)	REMARKS								
4	ADRIAN	55.6									
5	BUTLER	42.8									
6	BUTLER	29.4									
	TOTAL	128.0									

	SIGN RELOCATION											
SHEET	ı	LOCATIO	DN	EXISTING SIGN RELOCATION (EA)	REMARKS							
5	LOOP 49	LT	BUTLER	1.0	STOP SIGN							
			TOTAL	1.0								

	PAVEMENT MARKING												
				PREFORMED THERMOPLASTIC PAVEMENT MARKING 24 IN. STOP BAR	PREFORMED THERMOPLASTIC PAVEMENT MARKING 30 IN. MIDBLOCK	PAVEMENT MARKING REMOVAL (SYMBOL)	PAVEMENT MARKING REMOVAL						
SHEET		LOCATIO	ON	(LF)	(EA)	(EA)	(LF)	REMARKS					
6	LOOP 49	LT	BUTLER		3.0	3.0							
6	LOOP 49	RT	BUTLER		4.0	4.0							
7	RTE 52		BUTLER	96.0	44.0		624.0						
			TOTAL	96.0	51.0	7.0	624.0						

	CURB												
				CONCRETE CURB 6 IN. AND UNDER TYPE S									
SHEET		LOCATIO	ON	(LF)	REMARKS								
5	LOOP 49	LT	BUTLER	31.0									
5	LOOP 49	RT	BUTLER	11.0									
6	LOOP 49	LT	BUTLER	10.0									
			TOTAL	52.0									

	CONCRETE											
SHEET		LOCATIO	DN	8 IN. CONCRETE (SY)	REMARKS							
6	LOOP 49	RT	BUTLER	6.0	PARKING LOT TIE-IN							
			TOTAL	6.0								

	EROSION CONTROL INLET CHECK											
SHEET	LOC	AT I ON	INLET CHECK	REMARKS								
5	LT	BUTLER	1									
6	RT	BUTLER	1									
		TOTAL	2									

WESLEY A. O'NEAL NUMBER PE-2018021231 3/18/2024 VAR МО SHEET NO SW **BATES** JOB NO.
J7P3511
CONTRACT ID. PROJECT NO. BRIDGE NO.

SUMMARY OF QUANTITIES
SHEET 1 OF 2

					EFFECTIVE: 04-01-2023
TOTAL QTY	TOTAL SIGN		TY TOTAL SIGN		
1 1 1 1 1 1	DCRELOC NUM.		LOCRELOC NUM.		
SIGN IN SQ.FT EACH SQ.FT EACH	H SQ.FT.	SIGN IN SQ.FT EACH SQ.FT. EA	ACH SQ.FT.	ITEM	TOTAL
WARNING SIGNS	DESCRIPTION	GUIDE SIGNS	DESCRIPTION	NUMBER	QTY DESCRIPTION
WO1-1L 48X48 16.00	TURN (SYMBOL LEFT ARROW)	E05-1 36X48 12.00	GORE EXIT	6122008	IMPACT ATTENUATOR 40 MPH (SAND BARR
WO1-1R 48X48 16.00	TURN (SYMBOL RIGHT ARROW)	E05-2 48X36 12.00	EXIT OPEN	6122009	IMPACT ATTENUATOR 45 MPH (SAND BARR
WO1-2L 48X48 16.00	CURVE (SYMBOL LEFT ARROW)	E05-2a 48X36 12.00	EXIT CLOSED	6122010	IMPACT ATTENUATOR 50 MPH (SAND BARR
WO1-2R 48X48 16.00	CURVE (SYMBOL RIGHT ARROW) REVERSE TURN (SYMBOL LEFT ARROW)	GO20-1 60X24 10.00 2 20.00 GO20-2 48X24 8.00 2 16.00	ROAD WORK NEXT XX MILES END ROAD WORK	6122012	IMPACT ATTENUATOR 55 MPH (SAND BARR IMPACT ATTENUATOR 60 MPH (SAND BARR
WO1-3E 48X48 16.00	REVERSE TURN (SYMBOL RIGHT ARROW)	GO20-4 36X18 4.50	PILOT CAR FOLLOW ME	6122017	IMPACT ATTENUATOR 65 MPH (SAND BARR
WO1-4L 48X48 16.00	REVERSE CURVE (SYMBOL LEFT ARROW)	GO20-4a 42X30 8.75	PILOT CAR IN USE WAIT & FOLLOW	6122019	IMPACT ATTENUATOR 70 MPH (SAND BARR
WO1-4R 48X48 16.00	REVERSE CURVE (SYMBOL RIGHT ARROW)	GO20-4a 18X12 1.50	PILOT CAR IN USE WAIT & FOLLOW	6122020	REPLACEMENT SAND BARREL
WO1-4bL 48X48 16.00	DOUBLE ARROW REVERSE CURVE (SYMBOL LT ARROWS)	GO20-5aP 36X24 6.00 4 24.00	WORK ZONE (PLAQUE)	6122030	IMPACT ATTENUATOR (RELOCATION)
WO1-4bR 48X48 16.00	DOUBLE ARROW REVERSE CURVE (SYMBOL RT ARROWS)	MO4-8a 24X18 3.00	END DETOUR	6123001	1 TRUCK OR TRAILER MOUNTED ATTENUATOR
WO1-4cL 48X48 16.00 WO1-4cR 48X48 16.00	TRIPLE ARROW REVERSE CURVE (SYMBOL LT ARROWS) TRIPLE ARROW REVERSE CURVE (SYMBOL RT ARROWS)	MO4-9L 48X36 12.00 MO4-9R 48X36 12.00	DETOUR (LEFT ARROW) DETOUR (RIGHT ARROW)	6161008	2 ADVANCED WARNING RAIL SYSTEM BUOYS (BOATS KEEP OUT)
WO1-6 60X30 12.50	HORIZONTAL ARROW (SYMBOL)	MO4-9P 48X12 4.00	STREET NAME (PLAQUE)	6161013	BUOYS (NO WAKE)
WO1-6a 72X36 18.00	HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)	MO4-10L 48X18 6.00	DETOUR (ARROW LEFT)	6161014	SPECIAL SIGN ASSEMBLY (BOATS KEEP C
WO1-7 60X30 12.50	DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)	MO4-10R 48X18 6.00	DETOUR (ARROW RIGHT)	6161025	100 CHANNELIZER (TRIM LINE)
WO1-7a 72X36 18.00	DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)			6161030	TYPE III MOVEABLE BARRICADE
WO1-8 18X24 3.00	CHEVRON (SYMBOL)	R1-1 48X48 13.25	STOP	6161033	DIRECTION INDICATOR BARRICADE
WO1-8a 30X36 7.50 WO3-1 48X48 16.00	CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS) STOP AHEAD (SYMBOL)	R1-2 48TRI 6.93 R1-2a 36X36 9.00	YIELD TO ONCOMING TRAFFIC (PLAQUE)	6161040	2 FLASHING ARROW PANEL 12 TYPE III OBJECT MARKER
WO3-2 48X48 16.00	YIELD AHEAD (SYMBOL)	R1-3P 30X12 2.50	ALL WAY (PLAQUE)	6161055	SEQUENTIAL FLASHING WARNING LIGHT
WO3-3 48X48 16.00	SIGNAL AHEAD (SYMBOL)	R2-1 36X48 12.00 4 48.00	SPEED LIMIT (2X 25 MPH / 2X 35 MPH)	6161070	TUBULAR MARKER
WO3-4 48X48 16.00	BE PREPARED TO STOP	R3-1 48X48 16.00	NO RIGHT TURN (SYMBOL)	6161095	RADAR SPEED ADVISORY SYSTEM
WO3-5 48X48 16.00 2 32.00	SPEED LIMIT AHEAD	R3-2 48X48 16.00	NO LEFT TURN (SYMBOL)	41	CHANGEABLE MESSAGE SIGN,
WO4-1L 48X48 16.00	MERGE (SYMBOL FROM LEFT)	R3-3 36X36 9.00	NO TURNS	6161096	COMMISSION FURNISHED/RETAINED
WO4-1R 48X48 16.00	MERGE (SYMBOL FROM RIGHT) MERGE (ARROW SYMBOL)	R3-4 48X48 16.00 R3-7L 30X30 6.25	NO U-TURN (SYMBOL) LEFT LANE MUST TURN LEFT	6161098A	CHANGEABLE MESSAGE SIGN W/O COMM. INTERFACE - CONTRACTOR FURNISHED/RE
WO4-1aE 48X48 16.00	MERGE (ARROW SYMBOL)	R3-7R 30X30 6.25	RIGHT LANE MUST TURN RIGHT	101010307	CHANGEABLE MESSAGE SIGN WITH COMM.
WO5-1 48X48 16.00	ROAD/BRIDGE/RAMP NARROWS	R4-1 36X48 12.00	DO NOT PASS	6161099	INTERFACE - CONTRACTOR FURNISHED/RE
WO5-3 48X48 16.00	ONE LANE BRIDGE	R4-2 36X48 12.00	PASS WITH CARE	6162000A	WORK ZONE TRAFFIC SIGNAL SYSTEM
WO5-5 48X48 16.00	NARROW LANES	R4-8a 36X48 12.00	KEEP LEFT (HORIZONTAL ARROW)	6162002	TEMPORARY LONG-TERM RUMBLE STRIPS
WO6-1 48X48 16.00 WO6-2 48X48 16.00	DIVIDED HIGHWAY END (SYMBOL)	R4-7a 36X48 12.00 R5-1 30X30 6.25	KEEP RIGHT (HORIZONTAL ARROW)	1 61736000	TEMPORARY TRAFFIC BARRIER
WO6-2 48X48 16.00 WO6-3 48X48 16.00	DIVIDED HIGHWAY END (SYMBOL) TWO WAY TRAFFIC (SYMBOL)	R5-1 30X30 6.25 R5-1a 36X24 6.00	DO NOT ENTER WRONG WAY	6173600D	CONTRACTOR FURNISHED/RETAINED TEMPORARY TRAFFIC BARRIER
WO7-3a 30X24 5.00	NEXT XX MILES (PLAQUE)	R6-1L 54X18 6.75	ONE WAY ARROW (LEFT)	6173602B	CONTRACTOR FURNISHED/COMMISSION RET
WO8-1 48X48 16.00	BUMP	R6-1R 54X18 6.75	ONE WAY ARROW (RIGHT)	6174000A	TEMP. TRAFFIC BARRIER HEIGHT TRANSI
WO8-2 48X48 16.00	DIP	R6-2L 24X30 5.00	ONE WAY (LEFT)	6175010A	
WO8-3 48X48 16.00	PAVEMENT ENDS	R6-2R 24X30 5.00	ONE WAY (RIGHT)	11.7.0000	TEMPORARY TRAFFIC BARRIER
WO8-4 48X48 16.00 WO8-5 48X48 16.00	SOFT SHOULDER SLIPPERY WHEN WET (SYMBOL)	R9-9 24X12 2.00 8 16.00	SIDEWALK CLOSED SIDEWALK CLOSED AHEAD	6176000B	COMMISSION FURNISHED/RETAINED TEMP. TRAFFIC BARRIER HEIGHT TRANSI
WO8-6 48X48 16.00	TRUCK CROSSING (WITH FLAGS)	R9-11L 24X18 3.00	(ARROW LEFT) CROSS HERE	6177000B	COMMISSION FURNISHED/RETAINED
WO8-6c 48X48 16.00	TRUCK ENTRANCE		SIDEWALK CLOSED AHEAD	6208064A	TEMPORARY RAISED PAVEMENT MARKER
WO8-7 36X36 9.00	LOOSE GRAVEL	R9-11R 24X18 3.00	(ARROW RIGHT) CROSS HERE	9029400	TEMPORARY TRAFFIC SIGNALS
WO8-7a 36X36 9.00	FRESH OIL/LOOSE GRAVEL	R10-6 24X36 6.00	STOP HERE ON RED (45^ ARROW)	9029401	TEMPORARY TRAFFIC SIGNALS AND LIGHT
WO8-9 48X48 16.00	LOW SHOULDER	R11-2 48X30 10.00	ROAD CLOSED	1 6160000	ADA COMPLIANT MOVEABLE BARRICADE
WO8-11 48X48 16.00 WO8-12 48X48 16.00	UNEVEN LANES NO CENTER LINE		ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY	[6169905]	16 ADA COMPLIANT MOVEABLE BARRICADE
WOS-12 48X48 16.00	GROOVED PAVEMENT	R11-4 60X30 12.50	ROAD CLOSED TO THRU TRAFFIC	1	
WO8-15P 30X24 5.00	MOTORCYCLE (PLAQUE)	CONST-3A 60X48 20.00	FINE SIGN	1	
WO8-17 48X48 16.00	SHOULDER DROP-OFF (SYMBOL)	CONST-3X 56X12 4.67	SPEEDING/PASSING (PLATE)]	
WO8-17P 30X24 5.00	SHOULDER DROP-OFF (PLAQUE)			4	
W10-1 42RND. 9.62 W012-1 24X24 4.00	RAILROAD CROSSING DOUBLE DOWN ARROW (SYMBOL)	CONST-5 48X36 12.00 CONST-5 96X48 32.00	POINT OF PRESENCE POINT OF PRESENCE	4	
WO12-1 24X24 4.00 WO12-2 48X48 16.00	LOW CLEARANCE (SYMBOL)	CONST-7 48X24 8.00 2 16.00	RATE OUR WORK ZONE	-	
W012-2X 24X18 3.00	LOW CLEARANCE (PLAQUE)	CONST-7 72X36 18.00	RATE OUR WORK ZONE	1	
WO12-2a 84X24 14.00	OVERHEAD LOW CLEARANCE (FEET AND INCHES)	CONST-8 48X36 12.00	WORK ZONE NO PHONE ZONE	1	
WO12-4 120X60 50.00	LOW CLEARANCE XX FT XX IN XX MILES AHEAD	616-10.05 TOTAL			
W012-5 120X60 50.00	WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD	CONSTRUCTION SIGNS 268.00	TOTAL		
WO13-1 30X30 6.25 WO16-2 30X24 5.00	ADVISORY SPEED (PLAQUE) XXX FEET (PLAQUE)	616-10.10 RELOCATED SIGNS	TOTAL **		
WO16-3 30X24 5.00	X MILE (PLAQUE)	RELOCATED STONS			
WO20-1 48X48 16.00 4 64.00	ROAD/BRIDGE/RAMP WORK AHEAD	1			
WO20-2 48X48 16.00	DETOUR AHEAD				
WO20-3 48X48 16.00	ROAD CLOSED AHEAD		G TEMPORARY TRAFFIC CONTROL		
WO20-4 48X48 16.00	ONE LANE ROAD AHEAD	DEVICES.			
WO20-5 48X48 16.00	RIGHT/CENTER/LEFT LANE CLOSED AHEAD 2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD	-			
WO20-5a 48X48 16.00	RIGHT/CENTER/LEFT LANE CLOSED AREAD	1			
WO20-7a 48X48 16.00 2 32.00	FLAGGER (SYMBOL	1			
WO21 2 36Y26 0 00	EDECH OIL	7			

WO21-2 36X36 9.00

WO21-5 48X48 16.00

WO22-1 48X48 16.00

WO22-2 42X36 10.50

WO22-3 42X36 10.50

GO22-1 21X15 2.19

FRESH OIL

SHOULDER WORK AHEAD

BLASTING ZONE AHEAD

WET PAINT (ARROW PIVOTS)

END BLASTING ZONE

TURN OFF 2-WAY RADIO AND PHONE

WESLEY A.O'NEAL NUMBER ESSIONAL ENG ATOR 40 MPH (SAND BARRELS) ATOR 45 MPH (SAND BARRELS) ATOR 50 MPH (SAND BARRELS) ATOR 55 MPH (SAND BARRELS) ATOR 60 MPH (SAND BARRELS) 4/11/2024 ATOR 65 MPH (SAND BARRELS) ATOR 70 MPH (SAND BARRELS) VAR МО SHEET NO SW 3 LER MOUNTED ATTENUATOR (TMA) BATES JOB NO. J7P3511 ASSEMBLY (BOATS KEEP OUT) PROJECT NO. BRIDGE NO. ASHING WARNING LIGHT ONTRACTOR FURNISHED/RETAINED SSAGE SIGN WITH COMM. ONTRACTOR FURNISHED/RETAINED G-TERM RUMBLE STRIPS RNISHED/COMMISSION RETAINED BARRIER HEIGHT TRANSITION MPORARY TRAFFIC BARRIER BARRIER HEIGHT TRANSITION FFIC SIGNALS AND LIGHTING

> 800 E 101st Terr., Ste. 20 Kansas City, MO 64131 Phone (816) 701-3100 Fax (816) 942-3013

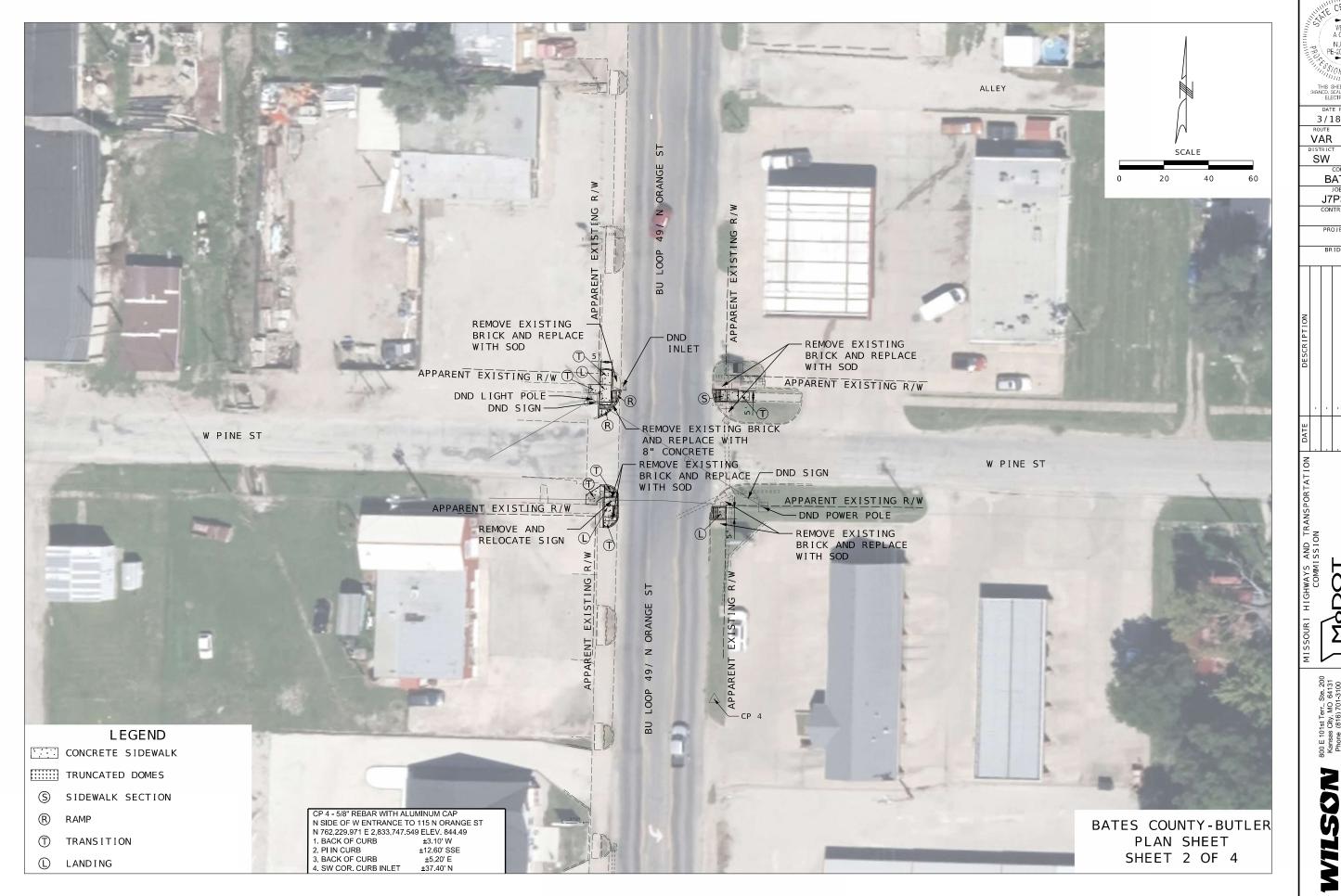
> > WILSON &COMPANY ENGINEERS & ARCHITECTS

SUMMARY OF QUANTITIES
SHEET 2 OF 2



3/18/2024 VAR МО SW 4 BATES JOB NO.
J7P3511
CONTRACT ID

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NUMBER

3/18/2024

BATES J7P3511

PROJECT NO

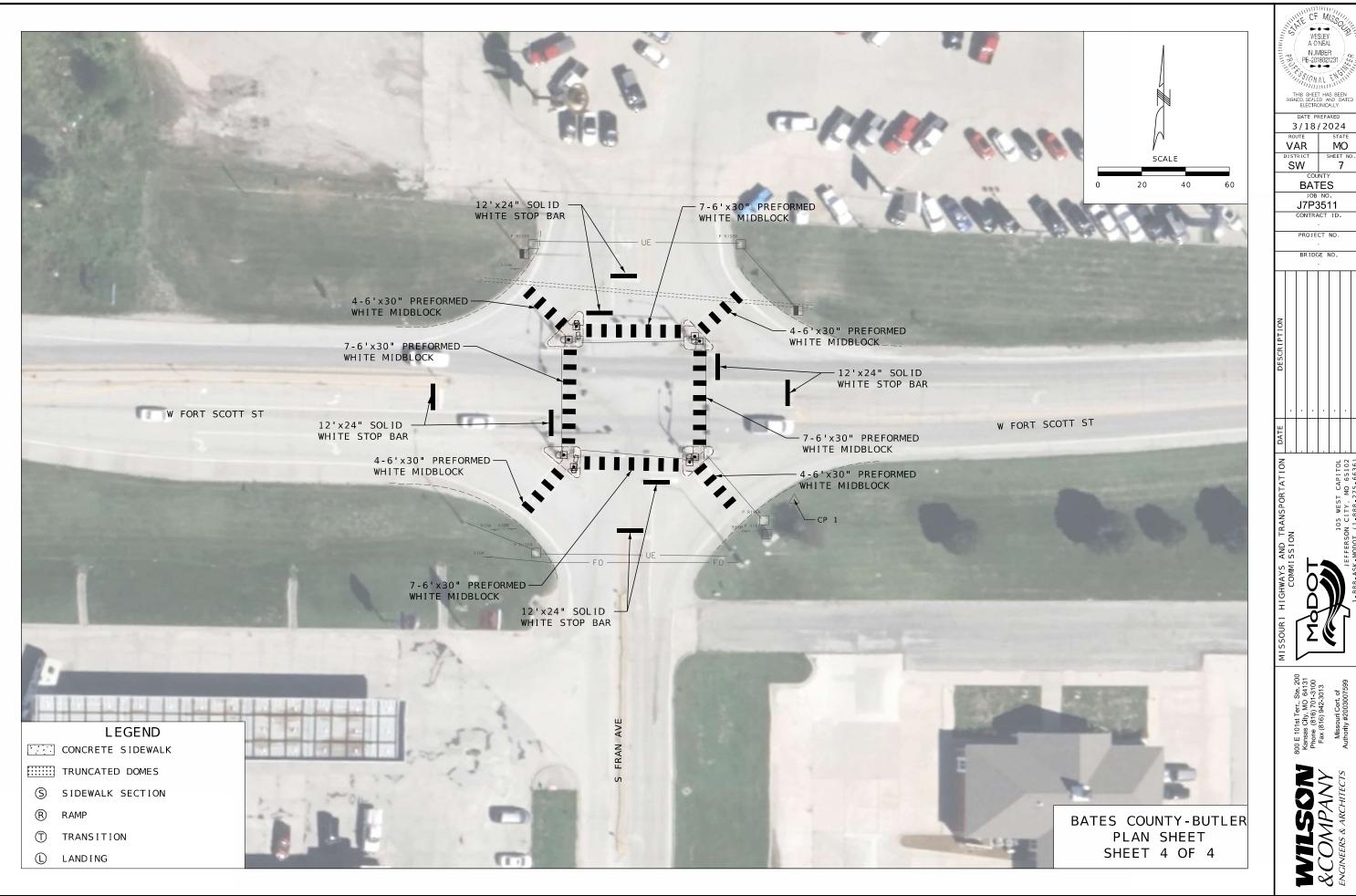
SW

МО

5

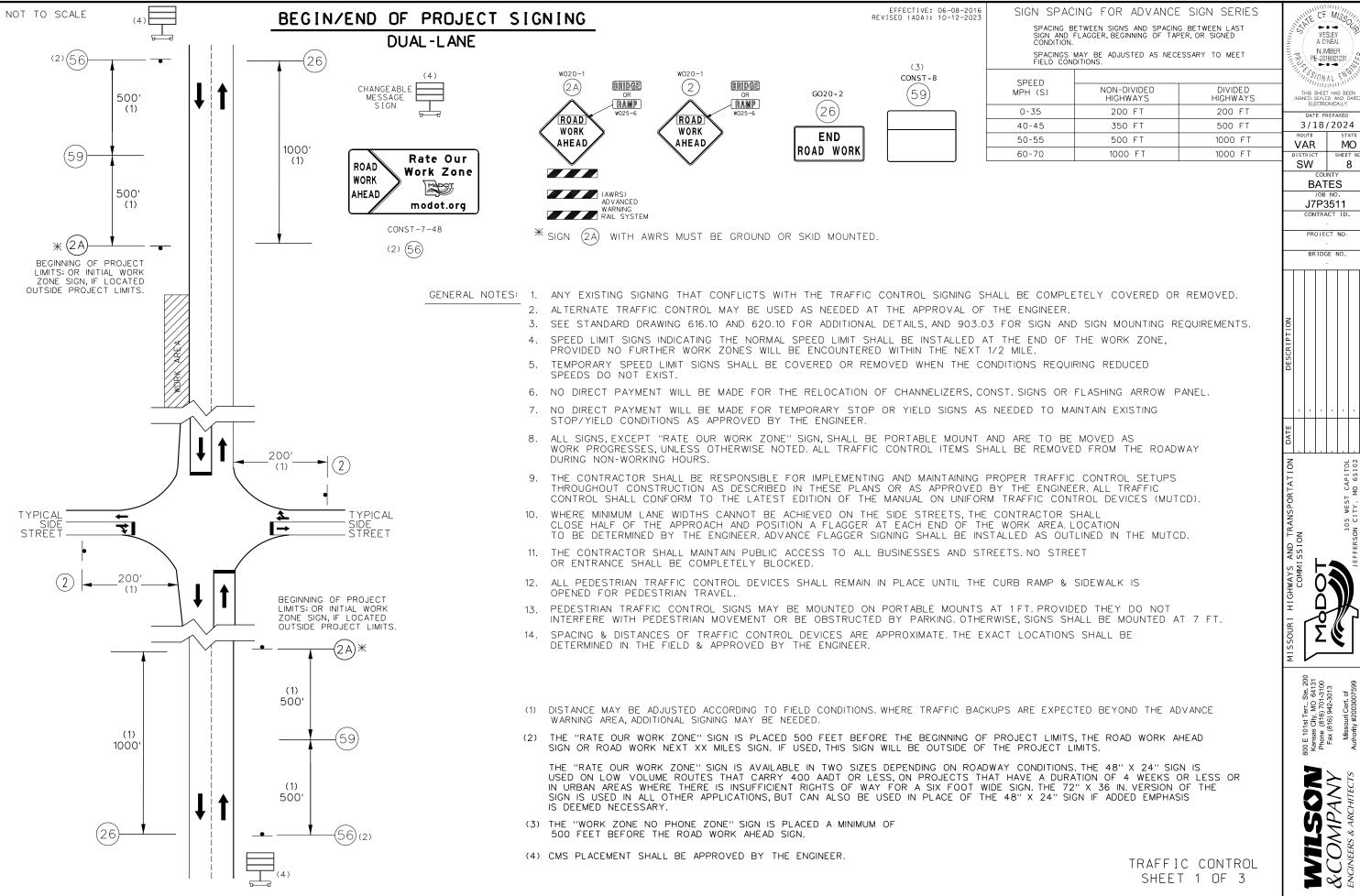


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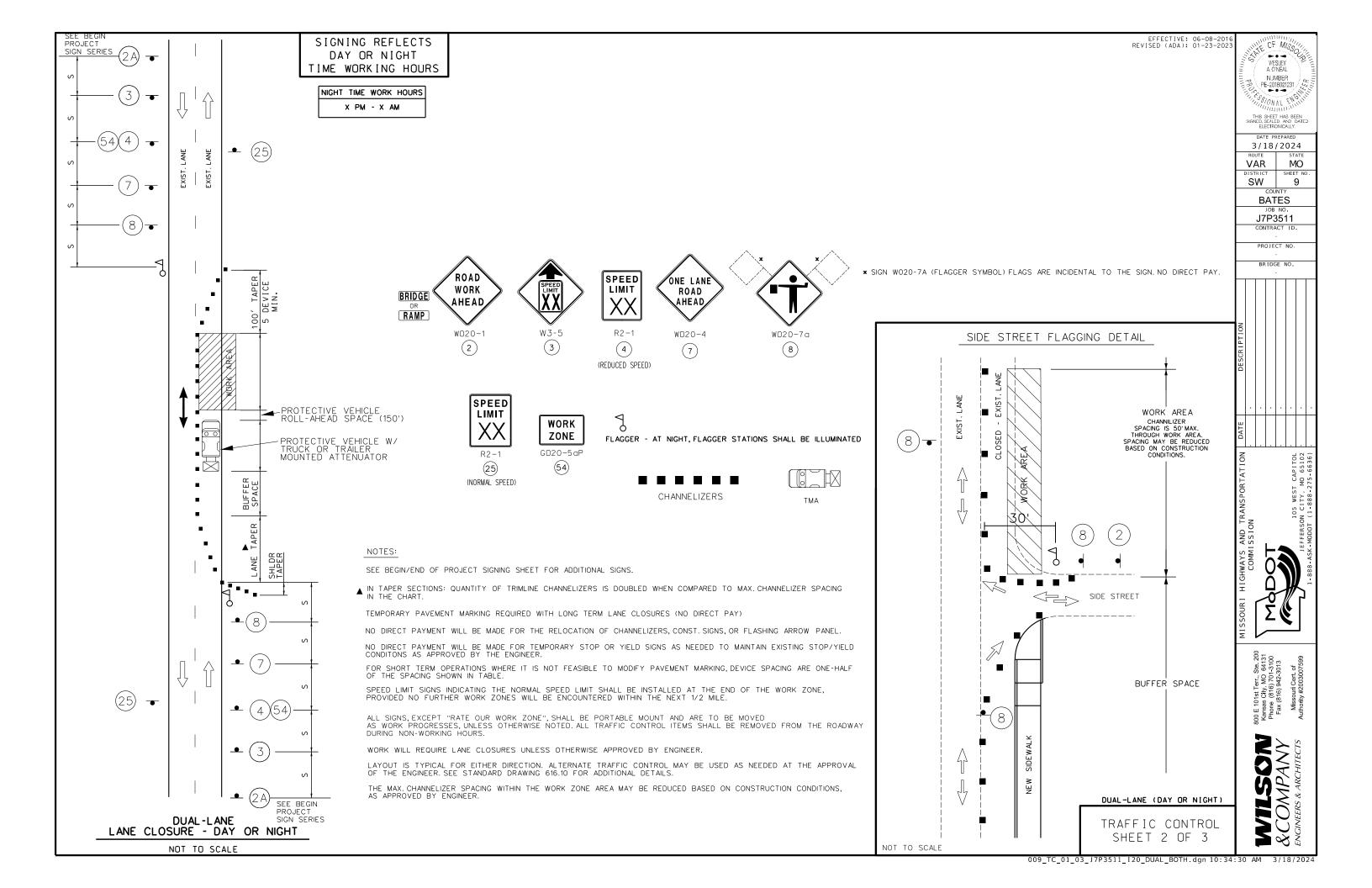


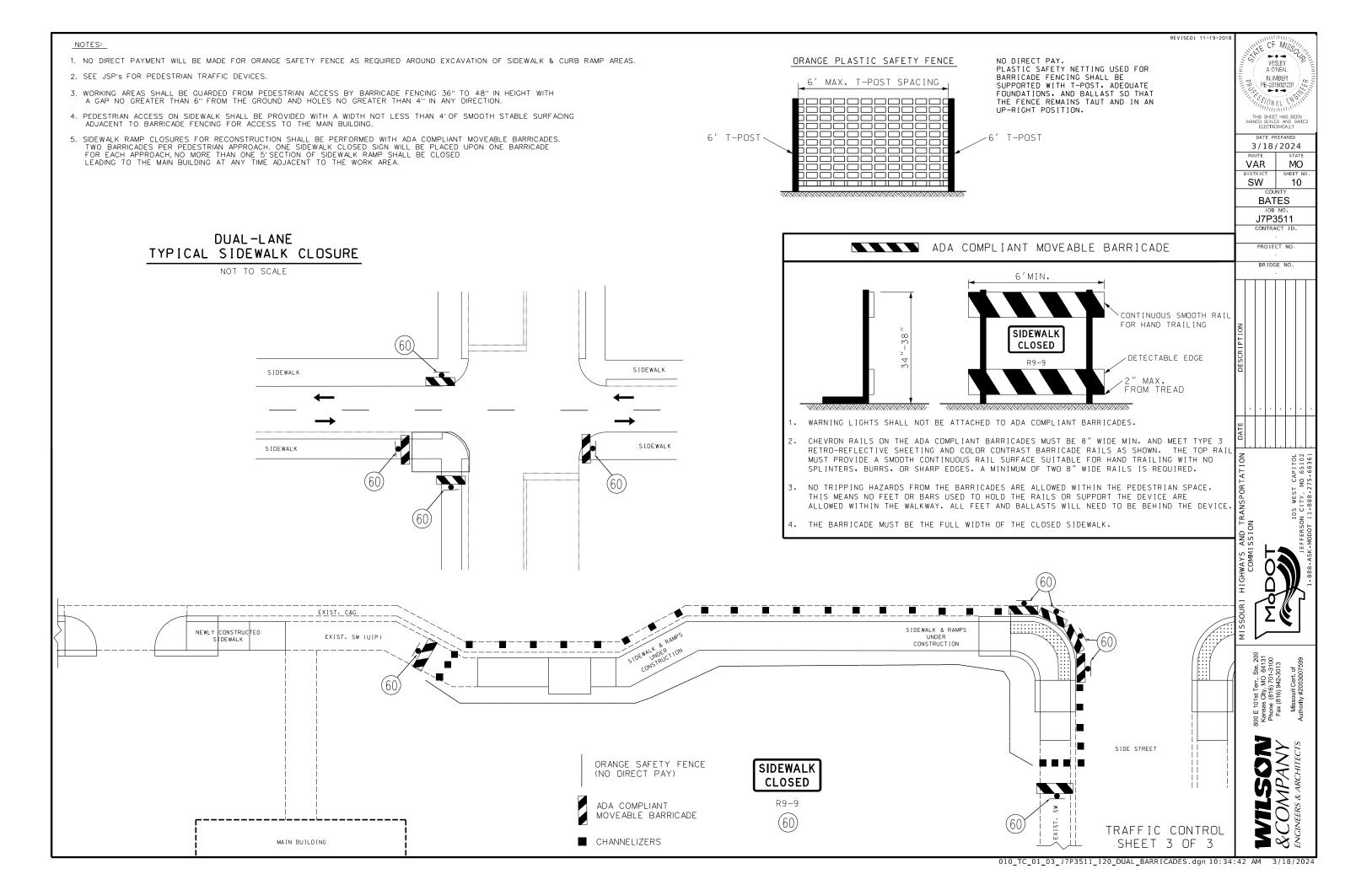
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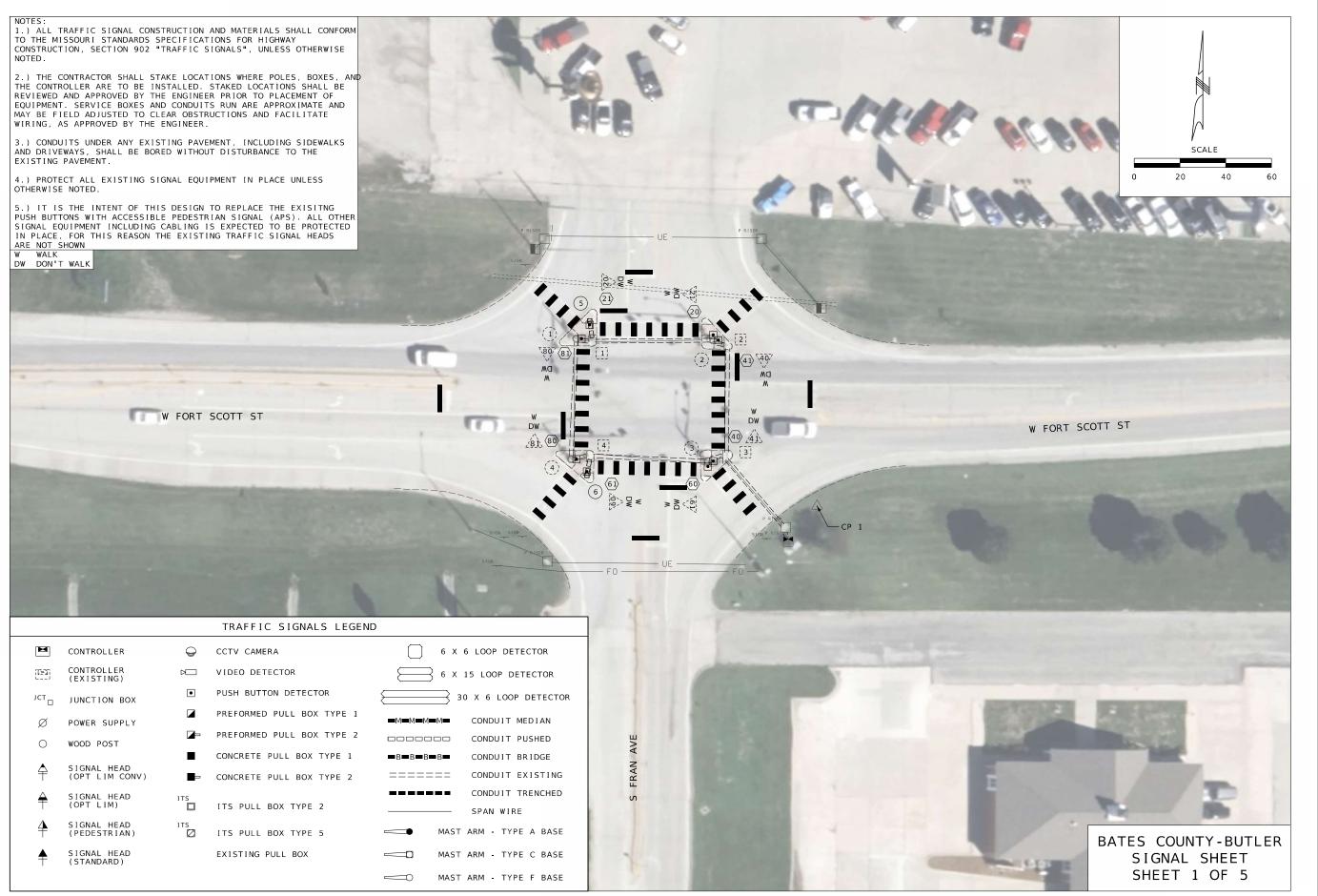
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8







V/ESLEY A. O'NEAL

NUMBER PE-2018021231 ESSIONAL ENG

3/18/2024

BATES

J7P3511

PROJECT NO

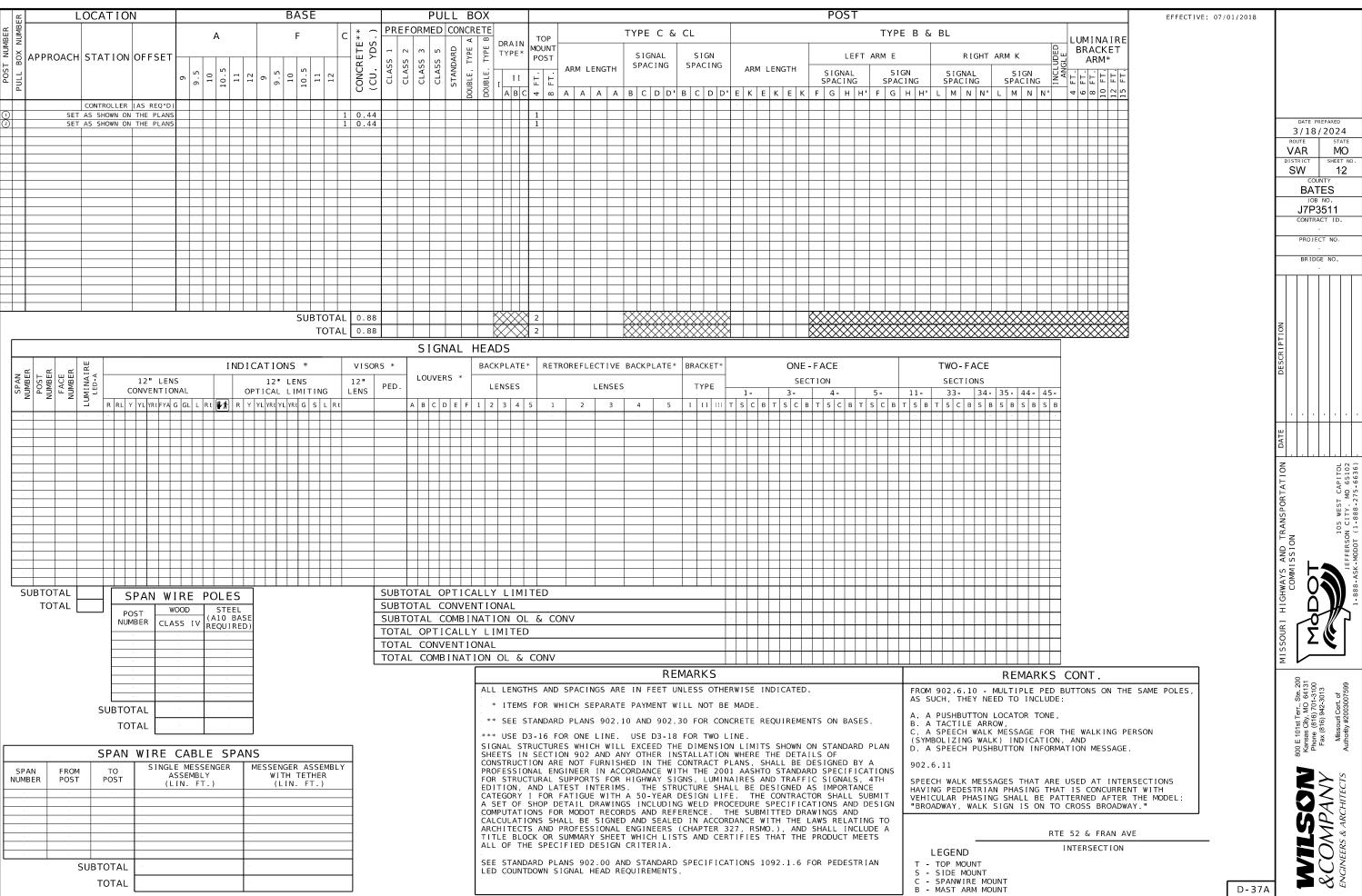
BRIDGE NO.

MO

1.1

VAR

SW



EFFECTIVE: 10-01-2015 3/18/2024 CONDUIT (WITH #14 TRACER WIRE) CABLE VAR МО SHEET NO. 1:3 CENTER TO CLOSED LOOP ON STRUCTURE SW LUMINAIRE GROUND CONTROL DETECTOR FIBER CENTER TO INTERCONNECT POLE & BRACKET BATES REMARKS FROM TO CONTROL REMARKS 1c #14 IN DUCT 2c #14 LEAD-IN CABLE SINGLE- MODE MODE CENTER JOB NO.
J7P3511
CONTRACT ID. 2" 3" 3" 3 " 2c #16 | 5c #16 | 7c #16 | 3c #16 | 3 PAIR #16 DISTANCE 1c #6 1c #10 2c #12 24 1.0 2.4 PROJECT NO. 10 24 24 EXISTING 76 61 1 2 BRIDGE NO. 65 50 EXISTING [4] [3] 60 EXISTING 75 [3] CAB 45 EXISTING 60 800 E 101st Terr., Ste. 200 Kansas City, MO 64131 Phone (616) 701-3100 Fax (816) 942-3013 Missouri Cert. of Authority #2003007599 WILSON &COMPANY ENGINEERS & ARCHITECTS 20 SUBTOTALS 324 48 20 TOTALS 48 324 D-37B RTE 52 & FRAN AVE INTERSECTION

FROM TO

[1] (5) [4] (6)

CENTER

9

SUBTOTALS

TOTALS

3/18/2024

BATES JOB NO.
J7P3511
CONTRACT ID.

> PROJECT NO. BRIDGE NO.

МО

14

VAR

SW

					P	OW	ER SU	JPPLY	,				
LOC	LOCATION POWER SUPPL ASSEMBLY						(IR(III BREAKER IR P RATING*					SERVIC	E POLE
ADDDOAGU	STATION	05565	DRAWING	DD AWING			OLLER CONT &	POWER DISCO	SUPPLY NNECT	LIGHTING CONTROL * (ON POWER SUPPLY)		CONTRACT	UTILITY
APPROACH	STATION	OFFSET	902.15	DRAWING	AUXIL: BREAK		SIGNAL	MAIN B	REAKER	120 VOLT CONTROL	MAIN	FURNISH	COMPANY
							LAMPS	SIGNALS	LIGHTING	CABINET	BREAKER		
			Туре		1.5	Amps	· Amps	Amps	· Amps		Amps	CI. Ft.	
			Туре		1.5	Amps	Amps	Amps	Amps		Amps	CI. Ft.	

	CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT																					
LOCATION			SYSTEM ACTUATED		ON -0 SW I	ON-OFF* SWITCH COORDINATION INTERFACE *					NEMA CABINET		NET	170 CABINET			170					
APPROACH	STATION	OFFSET	(CLOSE		ACTO	DATED	TY	PE.	12C/7C	HARDWIRE (1)	TIME	CLOSED	LOOP	FIBER	TIME *		TYPE *		TYPE * SOFTWARE *		/ARE *	
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I	ΙI	MASTER	LOCAL	BASE	NEMA	170	LIBEK		Е	EV	DOUBLE	332	3365	BITRAN	WAPITI
														-								

		NEMA DETECTOR ASSIGNMENT										
			CARD POSITION									
		1	1 2 3 4 5 6 7 8									
C H A N	1											
N N E L	2											

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) =

	NEMA LOAD SWITCH ASSIGNMENTS											
1	2	3	4	5	6	7	8	9	10	11	12	

		SIGN	NAL SIG	VS.	
	1	7101	1, LE 310	10	
QUANTITY	MUTCD SIGN	SIZE	AREA	SIGN TOTAL AREA	SIGNAL SIGN MOUNTING HARDWARE
QUA	NUMBER			ITEM NO. 90208.33	ITEM NO. 90208.34
		INCHES	SQ.FT.	SQ.FT.	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		
	D3 - 1	58 X 18	7.3		
	D3 - 1	83 X 18	10.4		
	R10-3E	9 X 15	0.9		
	R10-11A	24 X 30	5.0		
	R10-12	30 X 36	7.5		
	R10-13	36 X 24	6.0		
	R10-27A	30 X 36	7.5		
4	R10-3EL	9 X 15	0.9	3.75	4
4	R10-3ER	9 X 15	0.9	3.75	4
<u> </u>	-				
	1		SUBTOTAL	7.5	8
			TOTAL	7.5	8

DETECTOR SCHEDULE											
	TYPE										
DETECTOR NUMBER	APPROACH	OPTIONAL DETECTION	APS PUSH	I NI	VIDE0						
			BUTTON ASSEMBLY	STANDARD	DELAY/ EXTEND *	CALL UNIT *	VIDEO				
20			1				*				
21			1								
40			1								
41			1								
60			1								
61			1								
80			1								
81			1								
+											
	•	TOTAL	8								

	170 INPUT FILE ASSIGNMENTS														
	CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	L			٠		٠					٠				٠
"] "	U														
	L														

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2) * ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

*** USE D3-1 FOR ONE LINE. USE D3-1B FOR TWO LINE.

(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) PROVIDE NEMA TS1 CABINET AND BASE.

(4) PROVIDE NEMA M60 CONTROLLER.

(5) PAYMENT FOR CABINET AND BASE SHALL BE SUBSIDIARY TO CABINET.

170 OUTPUT FILE ASSIGNMENTS										
FR1										
FR2							TOR			
FR3							MONITOR			
FR4										

	170 AUXILIARY OUTPUT FILE										
FR5											
FR6											

RTE 52 & FRAN AVE INTERSECTION

D-37C