# **GENERAL NOTES**

- 1. UTILITIES: Locations of existing utilities are shown for information only and are not guaranteed to be either accurate or complete. It is the Contractor's responsibility to contact all utilities and obtain utility staking prior to construction. No utilities on private property are shown. Contact Missouri One Call at 1-800-DIG-RITE,1-800-344-7483.
- 2. SOIL BORINGS: No soil boring information is included in the specifications. If the Contractor deems soils investigation necessary for use in preparing his bid, he shall do so at his own expense, and he shall be responsible for any and all permits, rights of entry, and restoration in accordance with the specifications.
- 3. DEVIATIONS FROM PLANS OR SPECIFICATIONS: Any deviations in the location or number of facilities noted for installation on these plans, or extension or rerouting the utilities constructed under these plans, requires the written authorization of the Owner's Representative before proceeding. Items installed in conflict with the plans and specifications and without such approval will not be approved for payment.
- 4. SITE ACCESS: The Contractor shall provide access to the work at any time for the owner, engineer, and state or local officials. The Contractor shall maintain access to existing parking lots and shall adhere to MUTCD requirements in Part 6 Temporary Traffic Control for maintaining traffic control during construction.
- 5. SAFETY: Safety on the job is the sole responsibility of the Contractor. The Contractor is responsible to replace and maintain proper barricades and/or fences to prevent injury to his and other personnel and the public. The Contractor shall leave such barricades and/or fences in place at any time he is absent from the job site.
- 6. All pavements, sidewalks, abandoned sewers, pipelines, excess earthwork, or other obstructions to construction that are removed, shall become the property of the Contractor unless specifically noted, and shall be disposed of by the Contractor in accordance with state regulations.
- 7. Removals of portions of pavement, curb gutters, sidewalk, and other similar improvements shall be removed to an existing joint if one is within 18". If there is no existing joint, a joint shall be sawed to minimum depth of 2" with true line and vertical face prior to removal.
- 8. All power poles, telephone poles, guy wires, and other utilities shall be relocated by owner of the facility unless noted otherwise.
- 9. The Contractor shall be responsible for the replacement of any property monuments (irons) removed or destroyed by his construction. Monuments being reset shall be placed by a Professional Land Surveyor, licensed to practice in the State of Missouri.
- 10. All disturbed areas shall be fertilized, seeded, and mulched in accordance with the specifications. The Contractor shall control all sediment run—off from leaving the project by using control features such as silt fences, or other means as directed by the City of Lee's Summit Design and Construction Manual, Ordinance No. 5813, Section 5100.
- 11. LAYOUT and DIGITAL DRAWINGS (civil) will be available to the successful contractor after award of the contract upon their request. Digital info will be in ACAD 2013 format.





# **UTILITY CONTACTS**

LOCATES: MISSOURI ONE CALL SYSTEM 811/800-DIG-RITE

WATER & SEWER: CITY OF LEE'S SUMMIT 816-969-1940

ELECTRIC: KANSAS CITY POWER & LIGHT 816-471-5275

GAS: SPIRE

816-969-2298

816-795-1100

CABLE TV: COMCAST CABLEVISION TIME WARNER

816-358-8833

TELEPHONE: SBC/AT&T

800-464-7928

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI SEC.31 TWP. 48N, RNG. 31W SEC.36 TWP. 48N, RNG. 32W



SITE LOCATION MAP

## **SHEET INDEX:**

C001 COVER

TRAFFIC CONTROL PLAN

C101 INTERSECTION IMPROVEMENTS
C501-502 CIVIL DETAILS

TC101 SIGNAL PLAN
TC102 WIRING PLAN

TC103 SIGNAL QUANTITIES TC501-503 SIGNAL DETAILS

### **DEVELOPER**

Townsend Summit, LLC 11311 McCormick Road, Suite 470 Hunt Valley, Maryland 21031 PH (816) 251-4100 CONTACT: Steve Rich

#### **FEMA INFORMATION:**

This tract is located in an "Area of Minimal Flood Hazard" as shown on FEMA FIRM Panel #29095C0417G, dated 1-20-17.

ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL, ORDINANCE NO. 5813. PORTIONS OF THE KANSAS CITY APWA SPECIFICATIONS HAVE BEEN INCORPORATED INTO THE LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL. THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL IS THE FINAL AUTHORITY.

#### PREPARED & SUBMITTED BY:

ANDERSON ENGINEERING, INC. COLUMBIA, MISSOURI

THOMAS
P. WOOTEN
NUMBER
E-2000150081
ROFESSION

Thomas P. Wooten, P.E. Missouri: P.E. No E-2000150081

ENGINEERS SURVEYORS - LABORATORIES - DRILLIN A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATIO MISSOURI CERTIFICATE OF AUTHORITY #000062 EXPIRES 12/31/20

N						
	ON ON	DESCRIPTION	ВУ	BY DATE	DRAWN BY:	JEN
					CHECK BY:	
					LICENSE NO.	E-200015
					DATE:	6-21-20
					FIELD BOOK:	
					JOB NUMBER:	19CO1
		COPYRIGH©ANDERSON ENGINEERING, INC. 2018	IC. 2018			

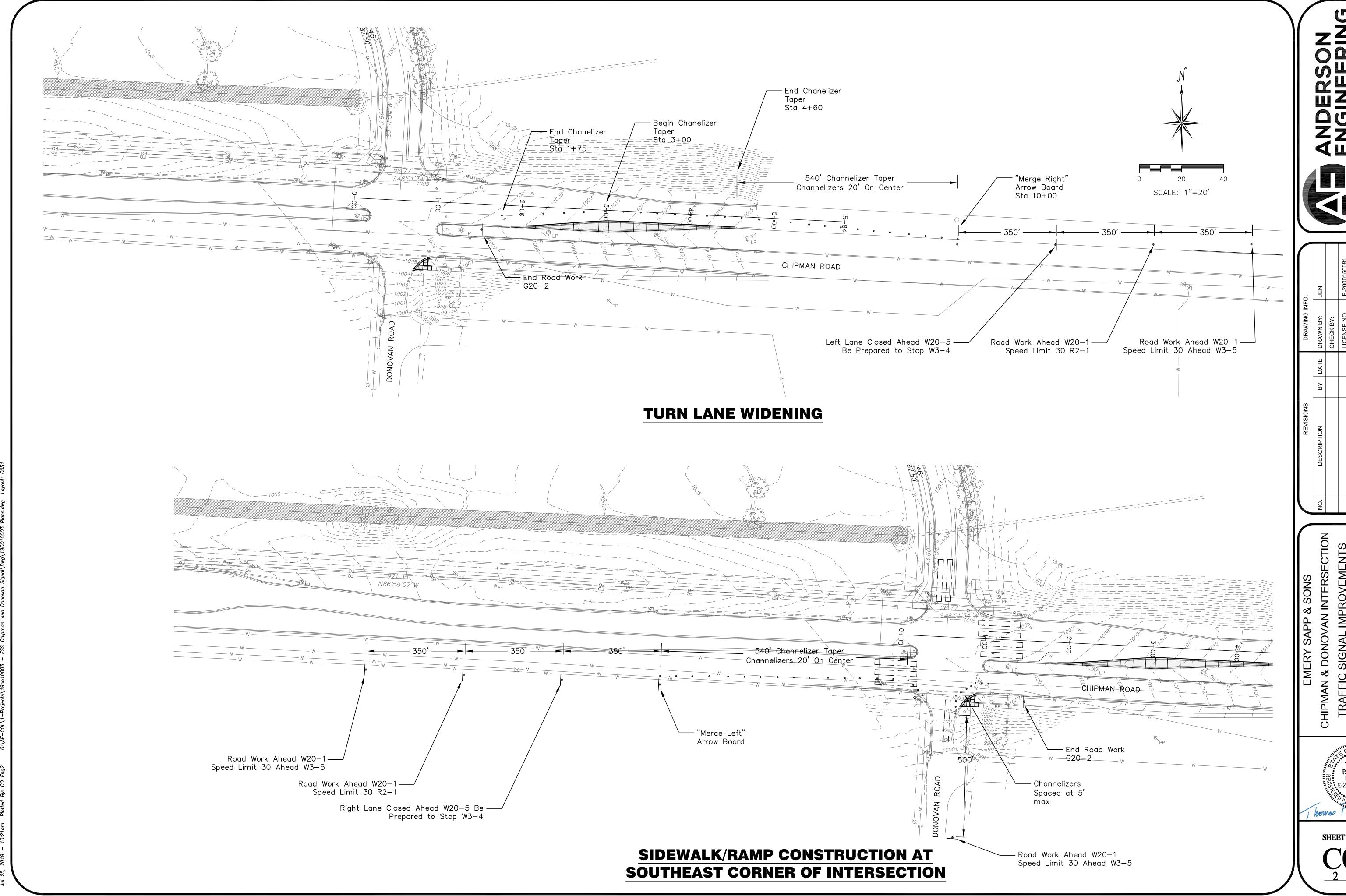
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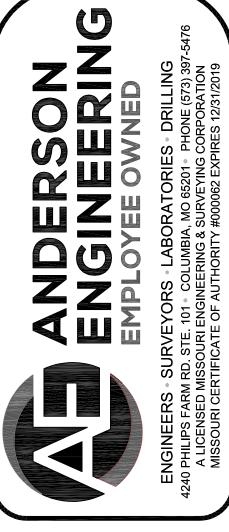
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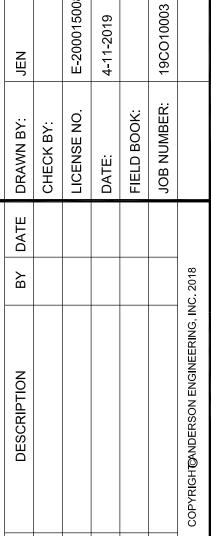
CHIPMAN

IMPROVEMENT

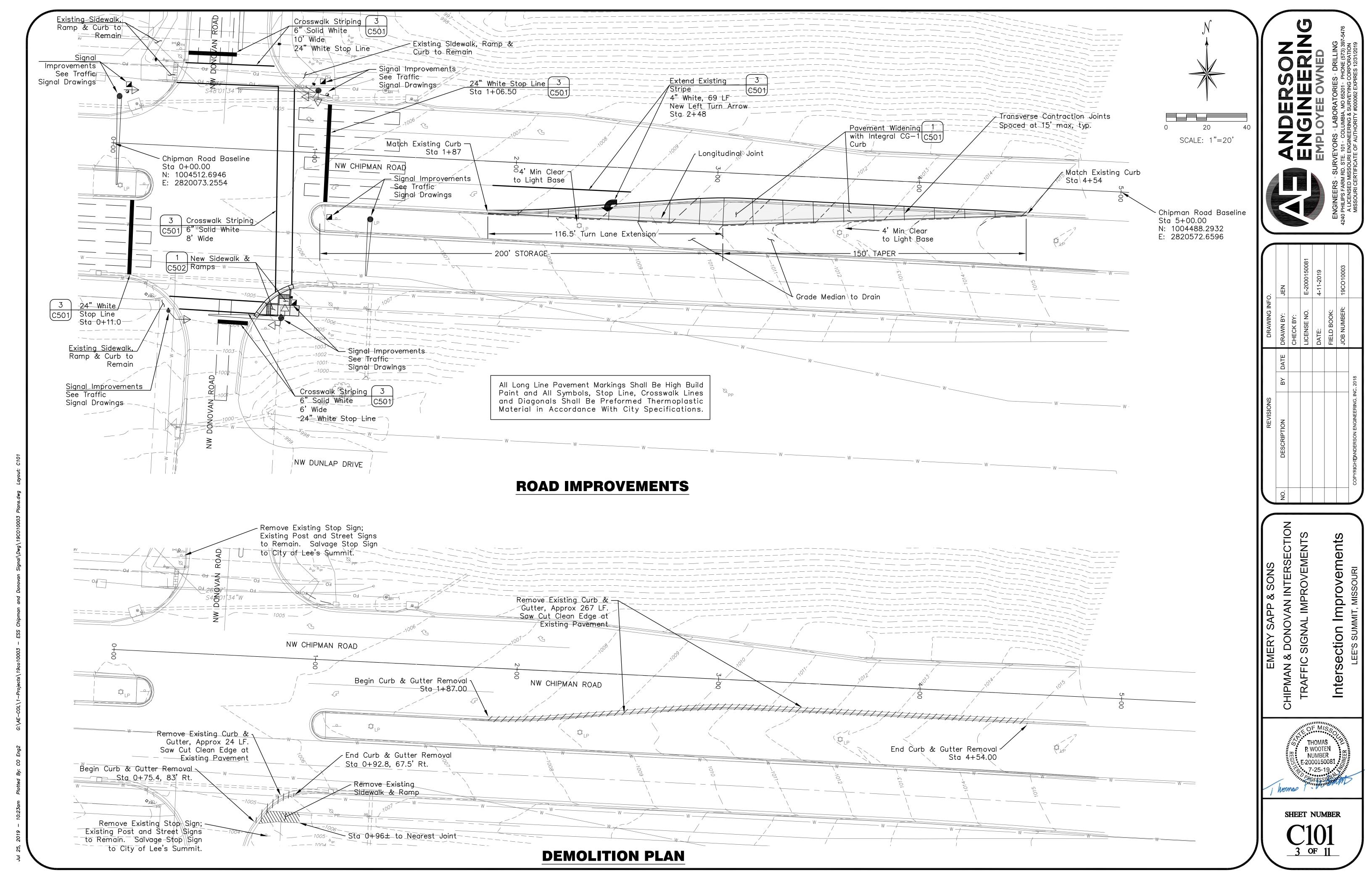
SHEET NUMBER COOL 1 OF 11







SHEET NUMBER



<8.33%

0 0

CURB & GUTTER DETAIL AT RAMP (ADA SLOPE REQUIREMENTS)

2" ASPHALTIC CONCRETE SURFACE COURSE

CURB REPLACEMENT DETAIL

THE ENTIRE CURB SECTION.

1. 3/4" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.

3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS

3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH 4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.

STANDARD SPECIFICATIONS SECTION 2205.2.

5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO

CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.

7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

GENERAL NOTES

- CURB & GUTTER

COMPACTED \_ STABLE SUBGRADE

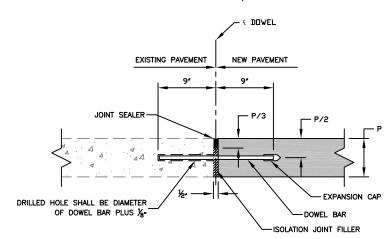
CURB & GUTTER DETAIL

CONCRETE FILL (DEPTH \_ VARIES, 4" MINIMUM)

<5.0%

TRANSVERSE CONTRACTION JOINT THE FINAL POSITION OF ALL DOWELS AND TIE BARS SHALL BE PERPENDICULAR TO THE PLANE OF THE JOINT AND PARALLEL TO THE SURFACE OF THE PAVEMENT AND PARALLEL TO EACH OTHER

LONG. CONTRACTION/CONSTRUCTION JOINT



DOWEL BARS SHALL BE SMOOTH REINFORCING BARS.
DOWEL BARS SHALL BE BONDED INTO THE EXISTING PAVEMENT. BONDING FOR DOWEL BARS SHALL BE EPOXY OR POLYESTER BONDING AGENTS. THE PORTION OF THE DOWEL OUTSIDE THE HOLE SHALL BE COATED WITH AN APPROVED LUBRICANT.

TRANSVERSE ISOLATION JOINT

	-	TABLE		
PCCP THICKNESS (P)	DOWEL SIZE	TIE BAR SIZE	DOWEL SPACING	TIE BAR SPACING
8"	1¼" × 18"	#5 x 30"	12" CTRS.	30" CTRS.
6"	N/A	#5 x 30"	N/A	30" CTRS.

GENERAL NOTES:
THE FINAL POSITION OF ALL DOWELS AND TIE BARS SHALL BE
PERPENDICULAR TO THE PLANE OF THE JOINT AND PARALLEL
TO THE SURFACE OF THE PAVEMENT AND PARALLEL TO EACH OTHER.

PAVEMENT WIDENING C501)

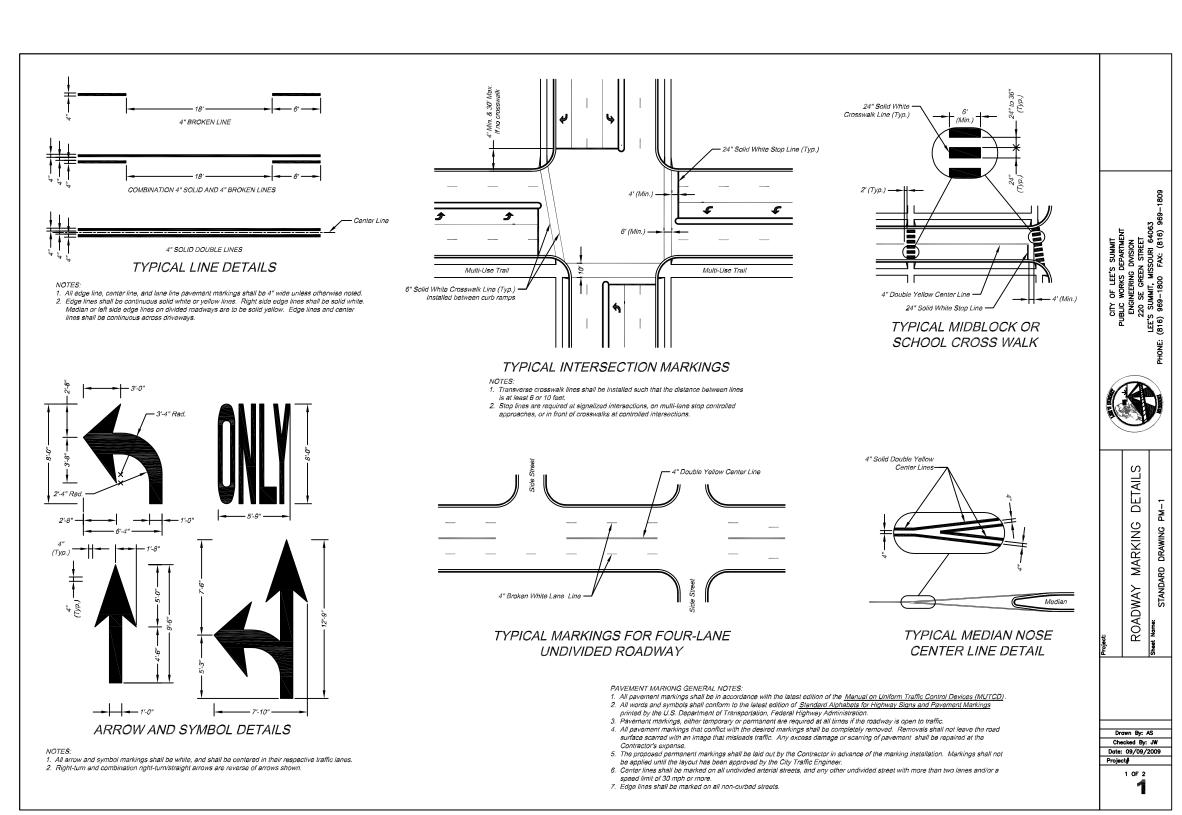
SUMMIT OUR!

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GEN-4

LEXISTING PAVEMENT





ROADWAY MARKING DETAILS  $(C501)^{\overline{N.T.S.}}$ 



SIGNAL IMPROVEMENT DETAIL AD ∞ర

DONOVAN

CHIPMAN THOMAS P. WOOTEN NUMBER

> SHEET NUMBER 4 OF 11

<del>| --- 7" ---</del>|

STRAIGHT BACK CURB & GUTTER

(TYPE CG-1)

→ 4" <del>| - |</del> 8" → | - 8" <del>- |</del> 4" <del>| - |</del>

STRAIGHT BACK DRY CURB & GUTTER

(TYPE CG-1 DRY)

\_\_\_\_\_ 24" \_\_\_\_<del>-</del>

- PAVEMENT SURFACE

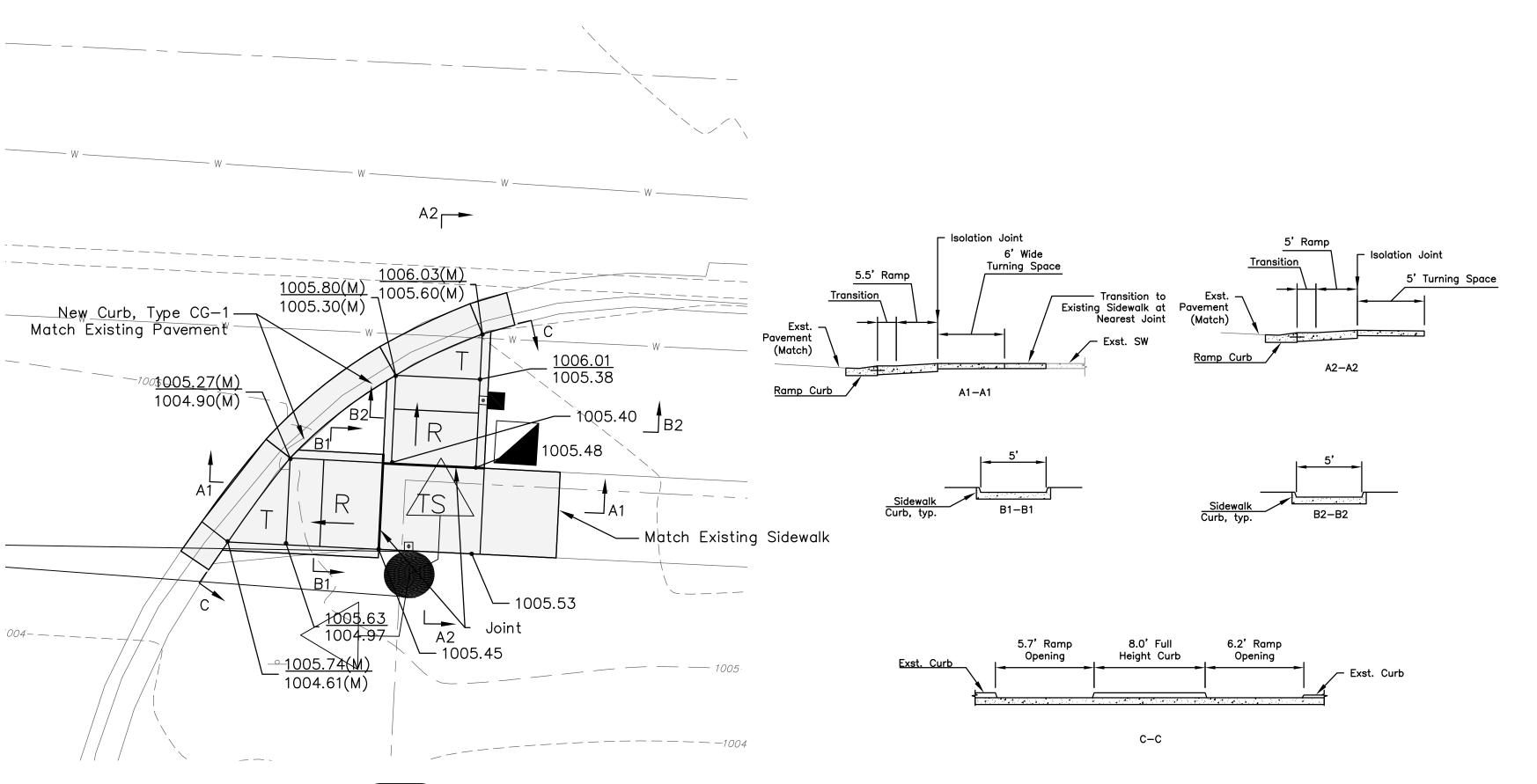
<del>-|</del> 4" <del>| |</del> 8" <del>--| -</del> 8" <del>--|</del> 4" <del>| -</del>

ROLL BACK CURB & GUTTER
(TYPE CG-2)

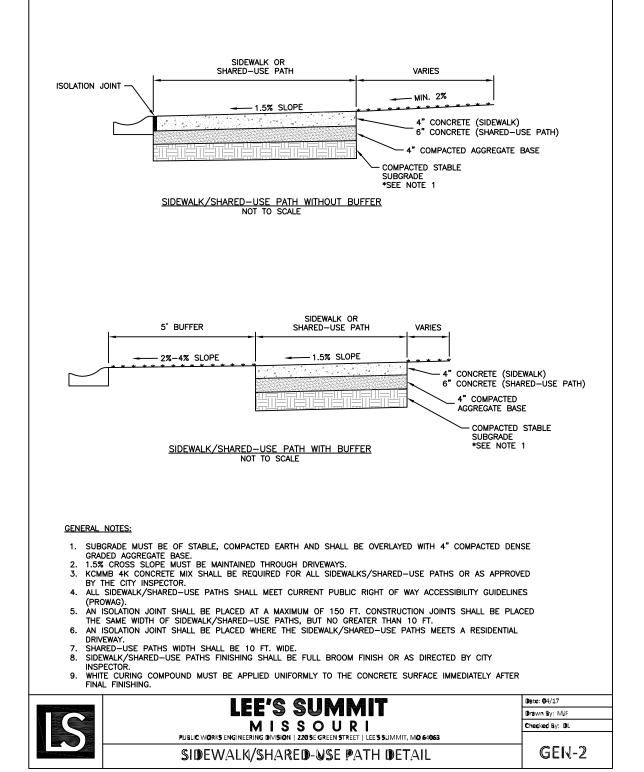
ROLL BACK DRY CURB & GUTTER

(TYPE CG-2 DRY)

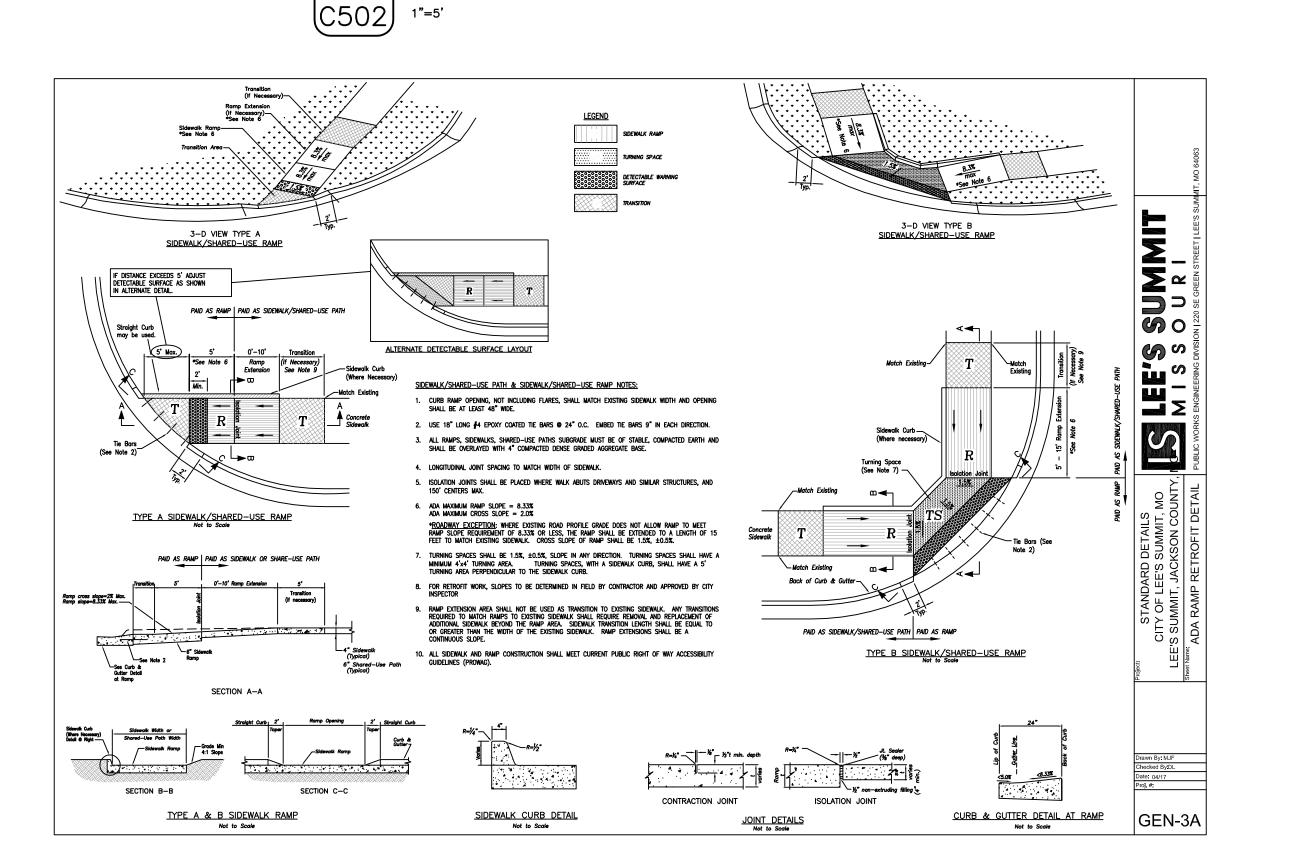
(C501) N.T.S.

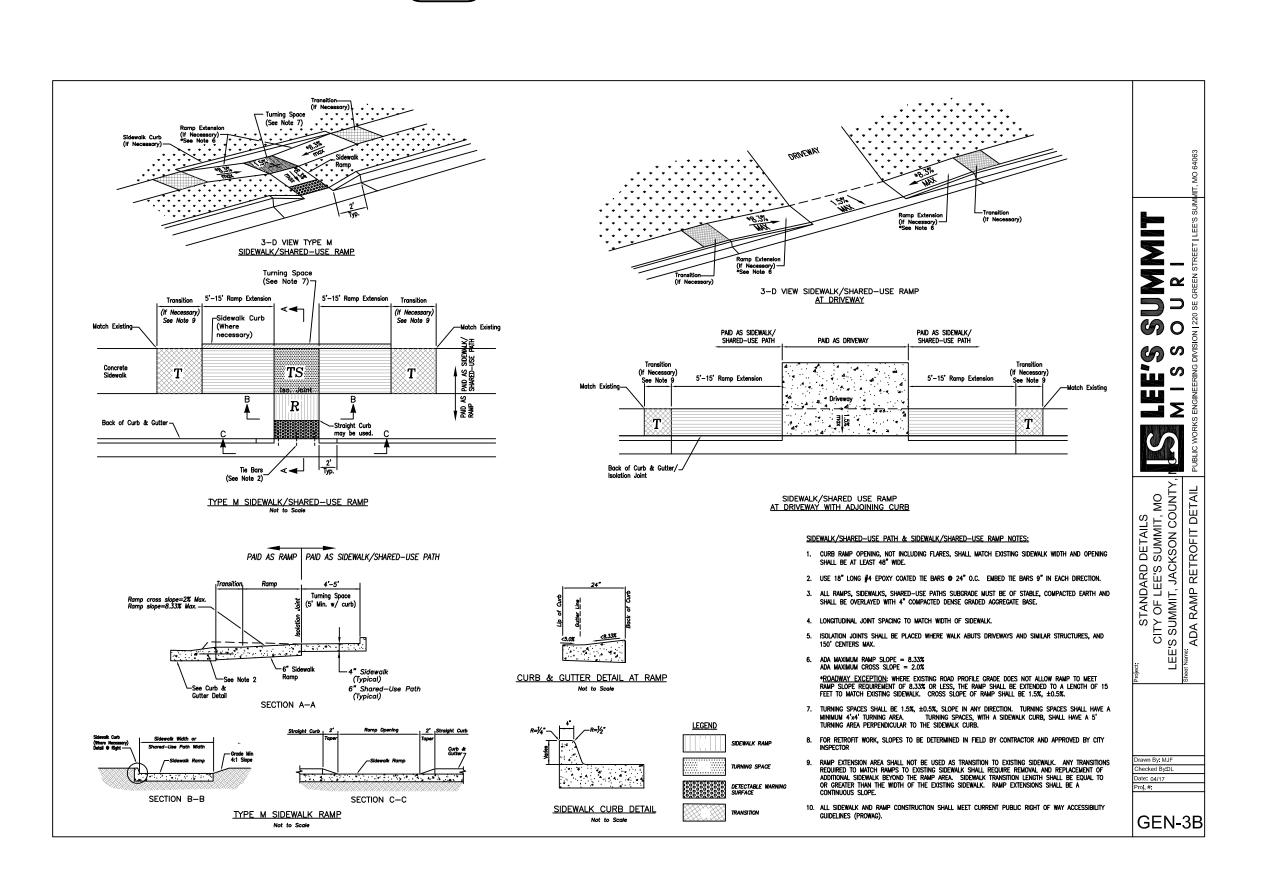


ENLARGED PLAN - NEW SIDEWALK AND RAMPS



2 SIDEWALK DETAIL C502 N.T.S.





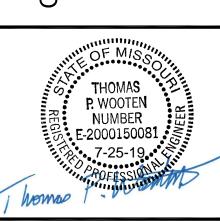




	REVISIONS			DRAWING INFO.	Ċ.
NO.	DESCRIPTION	ВУ	DATE	DRAWN BY:	JEN
				CHECK BY:	
				LICENSE NO.	E-200015
				DATE:	4-11-2019
				FIELD BOOK:	
				JOB NUMBER:	19CO1000
	COPYRIGH®ANDERSON ENGINEERING, INC. 2018	C. 2018			

CHIPMAN & DONOVAN INTERSECTION
TRAFFIC SIGNAL IMPROVEMENTS
ROAD WIDENING

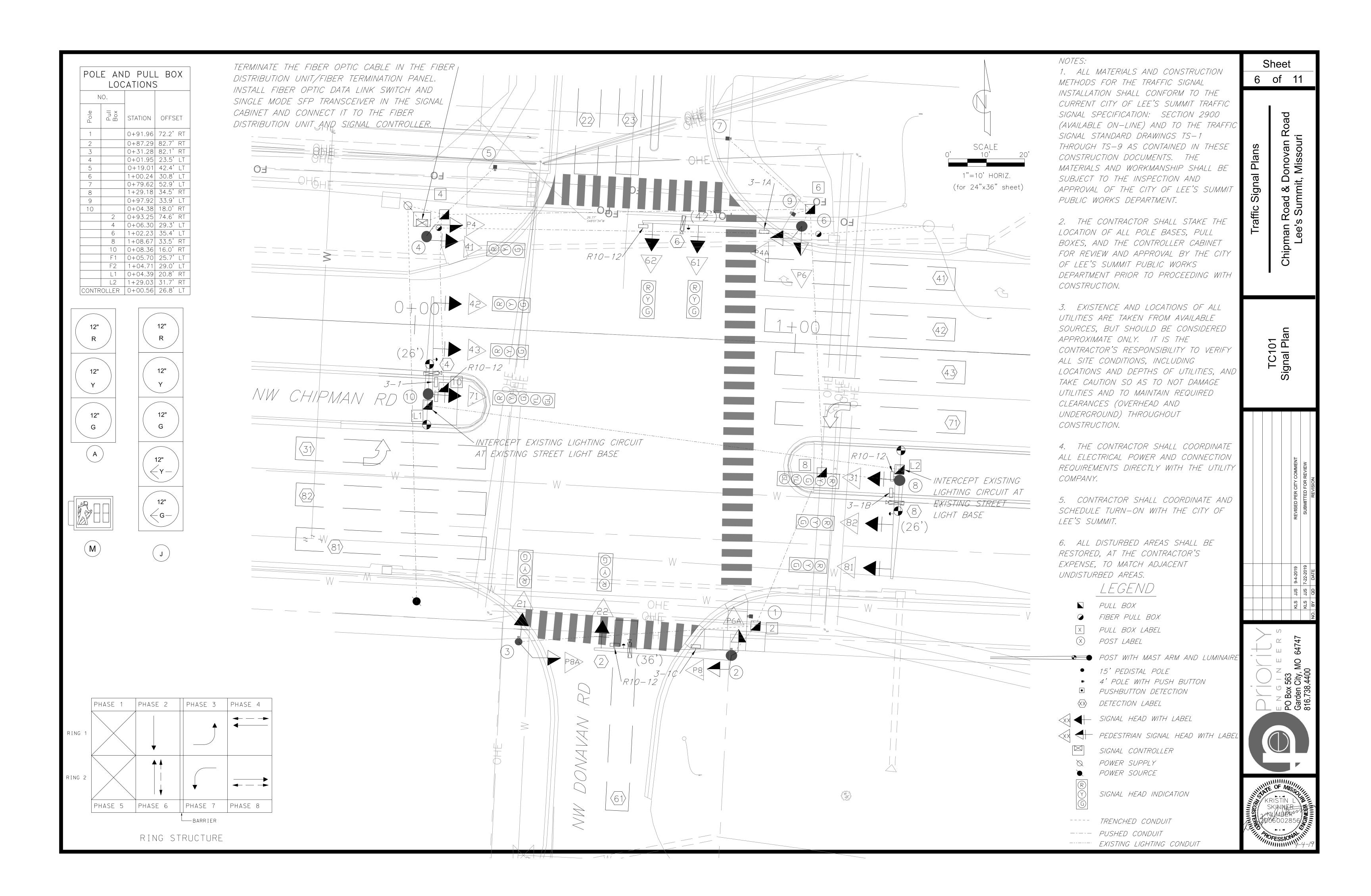
TAIL

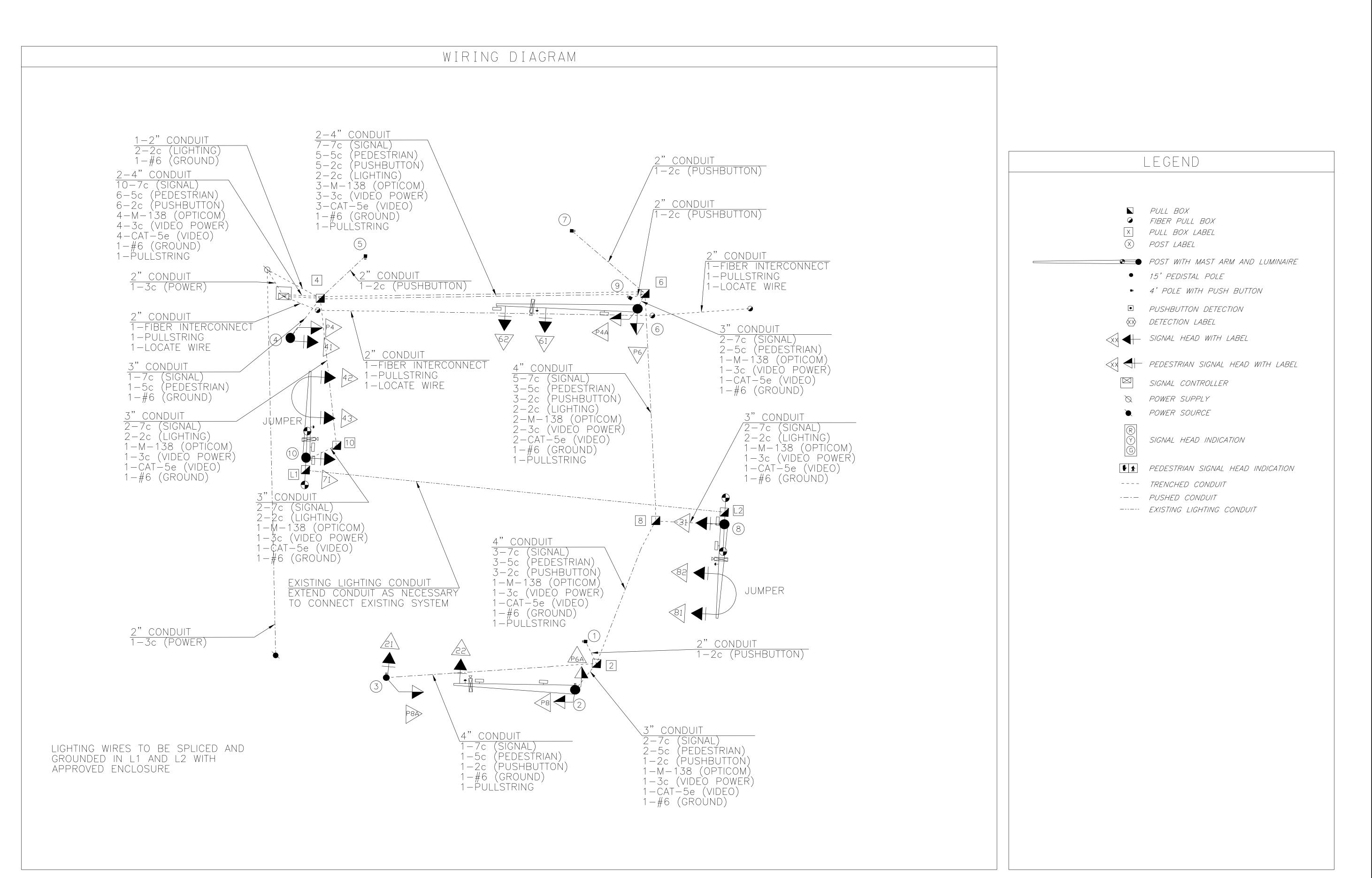


SHEET NUMBER

C502

5 OF 11





Sheet of 11

Signal Plans Traffic

Chipman Road & Donovan Road Lee's Summit, Missouri

TC102 Wiring Plan







*N0	TE:	Signal	head	d spacing	(fe	et)	may	be	adjusted	to
site	СО	nditions	as	approved	bу	the	proj	ect	inspector	•

												S	igi	۱A۱	_	ΗEΑ	DS	) )														
N	10.		7									NDIC	ATIO	NS					V	ISORS					S	SEC	TIO	NS	ò			
		Head Type	limited	Louvers	Backplate					"		, _				/alk		U W C		Туре					١	Лοι	unti	ng				
Pole	Face	paq	Opt. li	Lou	Back					12"	LED	5			Walk	Flash Don't Walk	W/DW	Countdown	Tun.	Cut Away		1	2	2		3			4		,	5
		H	0			R	Y	G	R←	Y←	G←	G1	Y→	G→		F Dor	>	Col	⊥	0 4	Р	S	Р	S	P	М	S	P	M	SF	PI	M S
2	22	Α			1	1	1	1											3							1						
2	P6A	М																1			1											
2	Р8	М																1			1											
3	21	Α			1	1	1	1											3						1							
3	P8A	М																1			1											
4	41	Α			1	1	1	1											3						1							
4	Р4	М																1			1											
6	61	Α			1	1	1	1											3							1						
6	62	Α			1	1	1	1											3							1						
6	Р4А	М																1			1											
6	Р6	М																1			1											
8	31	J			1	1	1	1		1	1								5												1	
8	81	Α			1	1	1	1											3							1						
8	82	Α			1	1	1	1											3							1						
10	42	Α			1	1	1	1											3							1				$\top$		
10	43	Α			1	1	1	1											3							1				+		
10	71	J			1	1	1	1		1	1								5									1		$\top$	1	
																														$\top$		
TOTA	ALS		X	X	11	11	11	11	X	2	2	X			X		X	6	37		6	X		X	2	7		X		2	2	$\bigvee$

- P Pole Mounted Signal Head M — Mast Arm Mounted Signal Head
- S Span Wire Mounted Signal Head

	SIGNS			
SIGN	LEGEND	NO.	S.F.	TOTAL S.F.
R10-12	LEFT TURN YIELD ON GREEN	4	5.0	20.0
R10-3E (LT)	PEDESTRIAN CROSSING SIGN	3	0.9	2.7
R10-3E (RT)	PEDESTRIAN CROSSING SIGN	3	0.9	2.7
D3-1	NW DONOVAN RD	1	15.0	15.0
D3-1A	NW CHIPMAN RD	1	15.0	15.0
D3-1B	NW DONOVAN RD	1	12.0	12.0
D3-1C	NW CHIPMAN RD	1	12.0	12.0
TOTAL				79.4

THE TRAFFIC SIGNAL SYSTEM SHALL BE COMPLETE AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SATISFACTORY OPERATION OF ELECTRICAL APPARATUS AND FOR COMPLETE OPERATION OF THE TRAFFIC SIGNAL SYSTEM WHETHER SPECIFICALLY MENTIONED OR NOT.

			BAS	SES	1A	ND F	PULL	ВОХ	ŒS		
N	Ο.			BAS	ES				PULL	BOXES	
Pole	Pull	B10	B13	С	EV	Power Supply	Conc. (C.Y.)		CLASS 2	CLASS 3	FIBER OPTIC
1				1			0.44				
2			1				3.40				
3				1			0.44				
4				1			0.44				
5				1			0.44				
6			1				3.40				
7		1		1			0.44				
8		1		1			2.62				
9		1		I			0.44 2.62				
	2						2.62		1		
	4								1	1	
	6									1	
	8									1	
	10								1		
	F1										1
	F2										1
	L1							1			
	L2							1			
		le Re	moval				1.07				
POV	NTR.				1	1	1.93				
101	NEK						0.23				
TOT	ALS	2	2	6	1	1	16.84	2	2	3	2

CONTROLLER AND EQUIPMENT	TOTALS
·	1017120
CABINET AND ACCESSORIES:  NEMA Type P TS1 Cabinet	1
CONTROLLER: Type 3608 M 52 EAGLE EPAC NTCIP Firmware 4.57 complete per plans, including software	1
EMERGENCY VEHICLE DETECTION SYSTEM (COMPLETE): GTT	1
VIDEO DETECTION SYSTEM (COMPLETE):	
InSync Adaptive Traffic Control System	1
FIBER DISTRIBUTION UNIT:	1
FIBER OPTIC DATA LINK SWITCH:	
Kyland SICOM 3170 or Equal	1
2—Circuit Power Supply (Utility Enclosure Pedestal)	1
Ground Rods	11
Pushbutton Detectors	6

	SI	GNAL	COI	NDUIT	-
FROM	TO	3" PVC	2" HDPE	3" HDPE	4" HDPE
	4				14
4	4			8	
4	(5)		19		
4	6				97
4	10			46	
10	10			5 5	
6	6			5	
6	7		29		
6	8				68
6	9		5		
8	8			21	
8	2				47
2	1		3		
2	(3)			10	
2	3			64	
<b>D</b>	Ø				
Ø					
Ø	4				
	total et)		56	159	226
BID 7	rotal et)		60	160	230

								CAE	3LE				
FROM	01	GROUND	PC	)WER/	LIGHT	ING		CONTROL ype 20—		EMERGENCY PRE-EMPTION CABLE**	SEN	LTI— ISOR :LE**	REMARKS
		#6	2c-8	3c-4	3c-6	3c-8	2c-14	5c-14	7c-14	m-138	3c#6	Coax	
	71								84				
	42								104				
$\boxtimes$	41								42				
	P4							39					
	EV4									83			
	DET4										85	85	
	PB4						49						
	62								189				
	61								179				
	P4A							139					
	P6							139					
	EV6									180			
	DET6										182	182	
	PB4A						162						
	PB6						138						
	31								243				
	82								255				
	EV8									252			
	DET8										251	251	
	22								316				
	P6A							271					
	P8							271					
	PB8						270						
	PB6A						263						
	EV2									315			
	DET2										313	313	
	21								328				
	P8A							325					
	PB8A						324						
42	43								15				
81	82								15				
Ø	LUM8		498										
Ø	LUM10		194										
Ø	PB4			16									
Ø				14									
	Ø			120									
_	<u> </u>												
Sy	ystem	407											
	Subtotal (Feet)	407	692	150			1206	1184	2046	830	831	831	
В	ID TOTAL (Feet)	410	700	150			1210	1190	2050	830	840	840	

\*\* Cable included in lump sum price for the system.

ALTERNATE	1 – FIBER	OPTIC INTERCONNECT
	CONDUIT	& CABLE

FROM	0	2" CONDUIT HDPE (Orange)	2" CONDUIT GRS	12-COUNT FIBER OPTIC CABLE (12 SM)	#14 STRANDED COPPER TRACER WIRE*	REMARKS
$\boxtimes$	F1	9		19	17	
F1	F2	99		109	107	
F2	ΕX	27		37	35	
SUBT( (fee		135		165	159	
3ID To		140		170	160	

Tracer wire shall be subsidiary to fiber cable line item.

Sheet

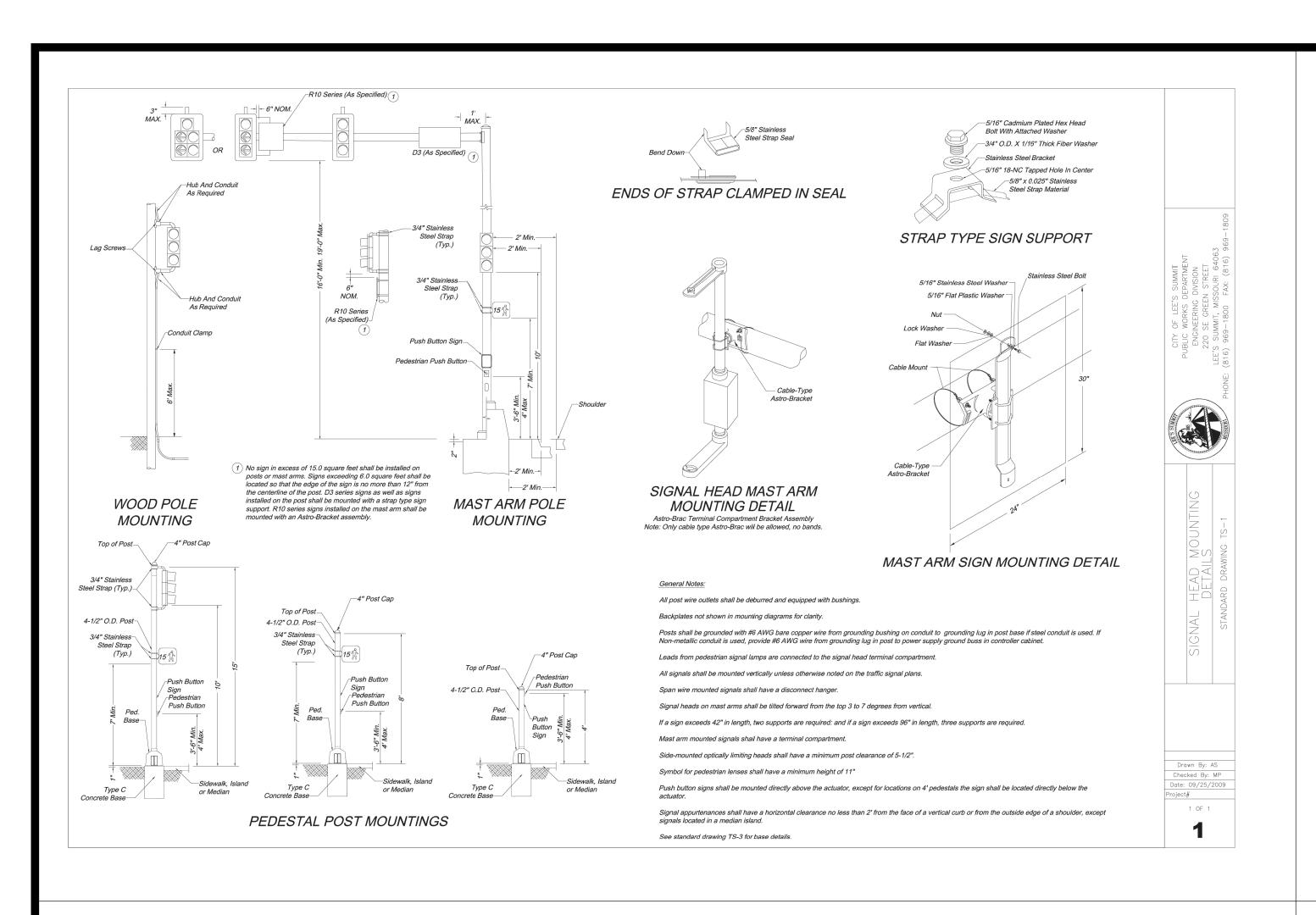
8 of 11

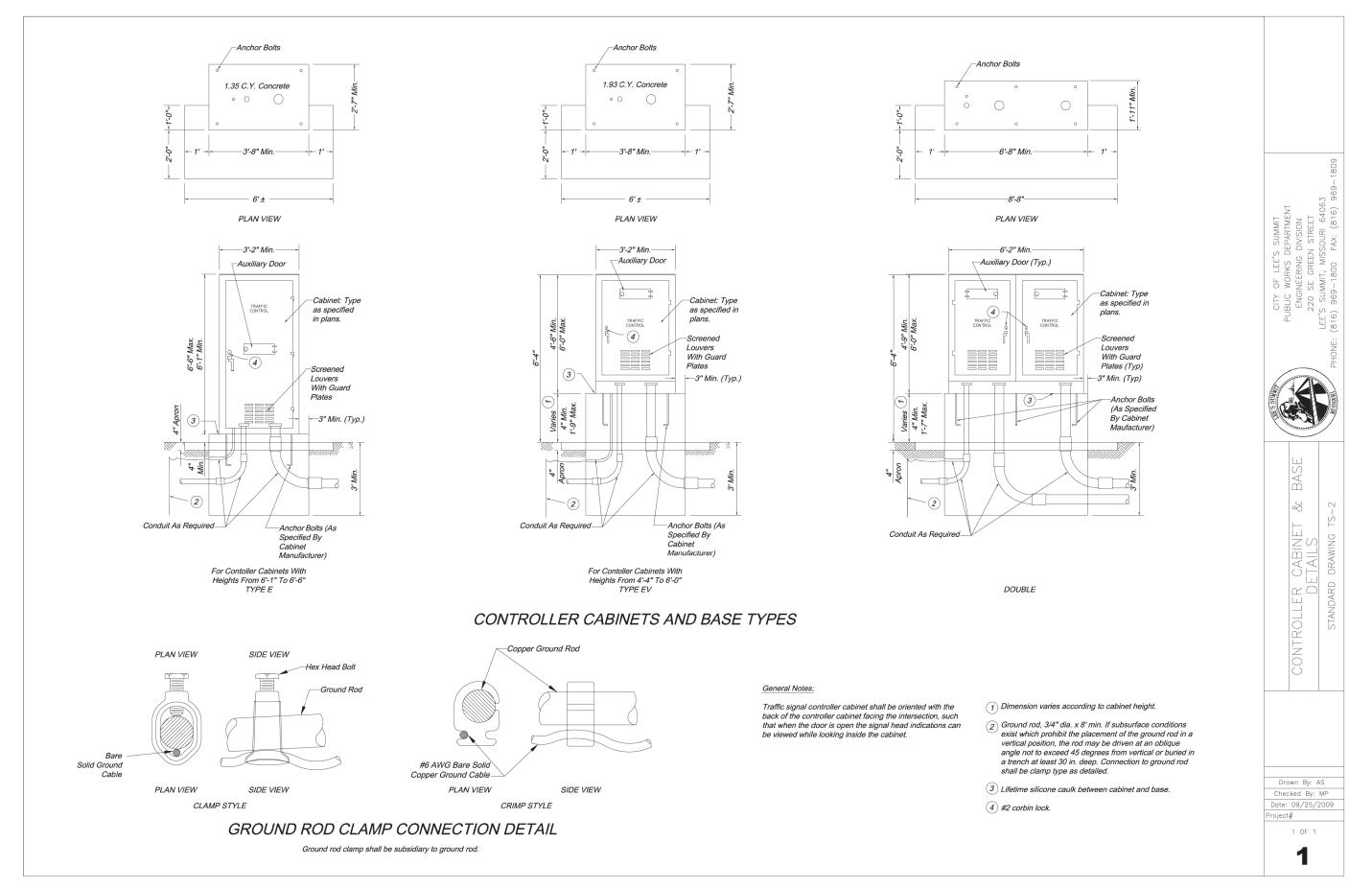
Traffic Signal Plans

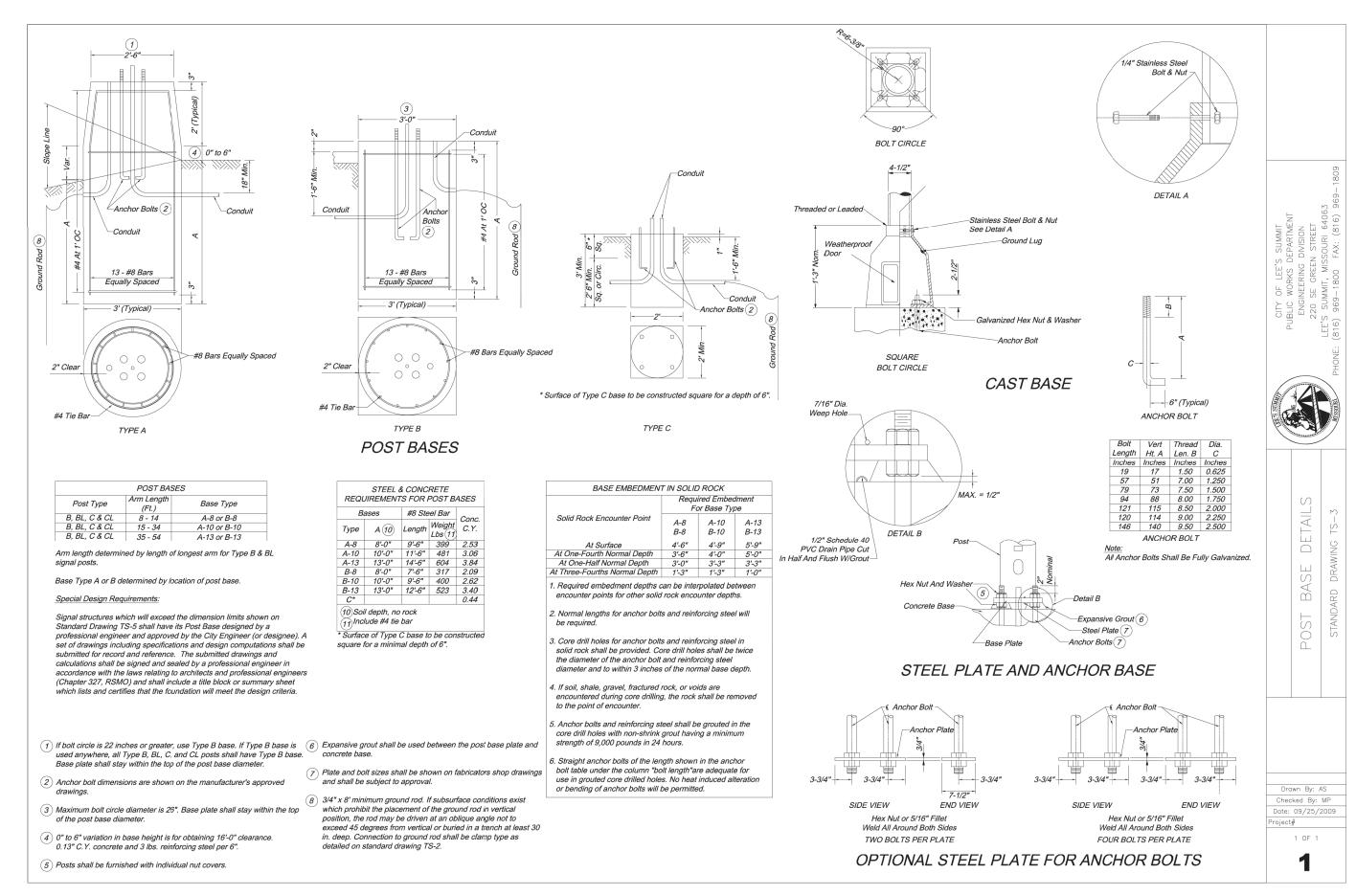
Chipman Road & Donovan Road Lee's Summit, Missouri

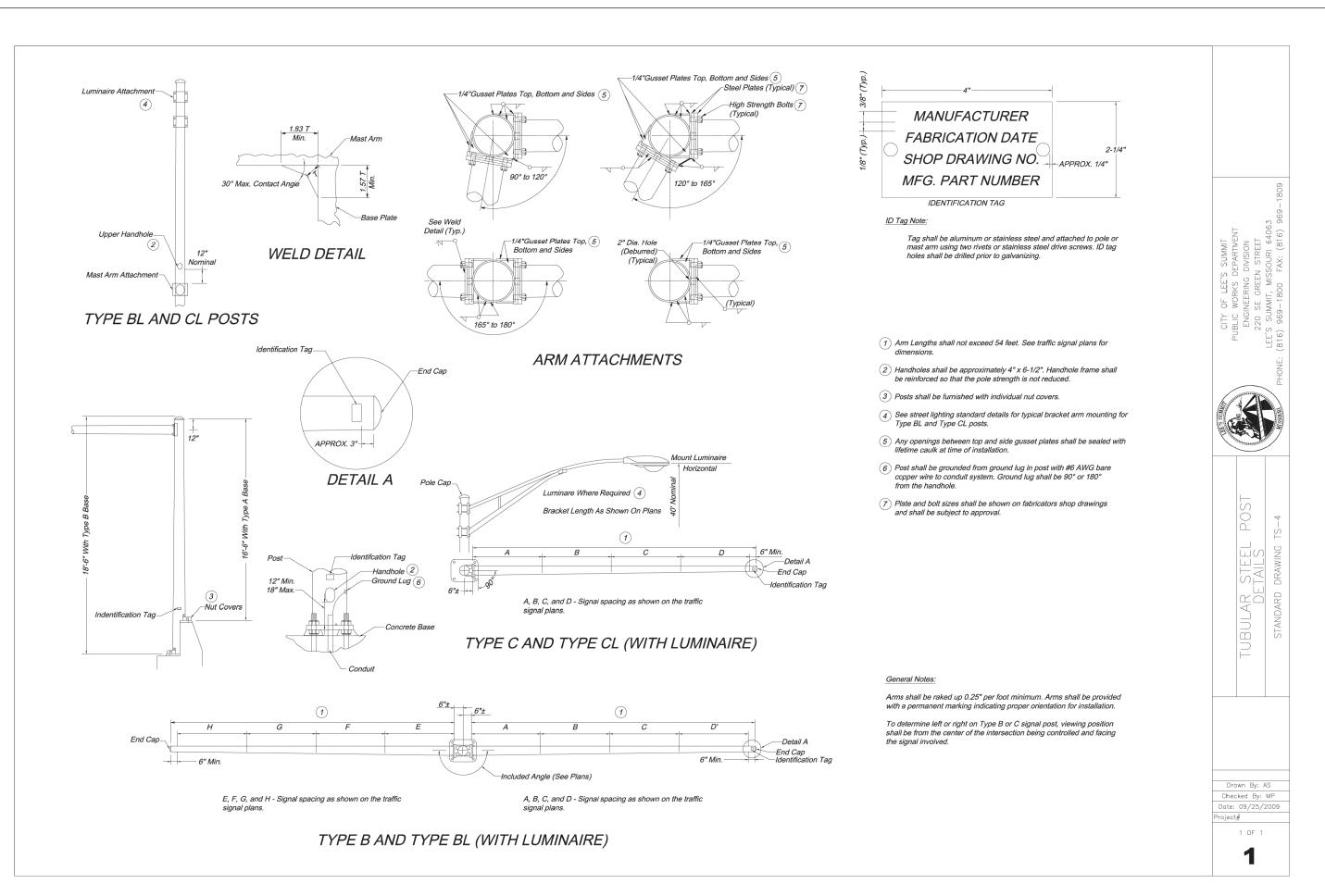
TC103 Signal Quantities











Traffic Signal Plans

6 S

Chipman Road & Donovan Road

Lee's Summit, Missouri

E E R S

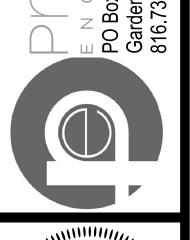
KLS JJS 9-4-2019

KLS JJS 7-22-2019

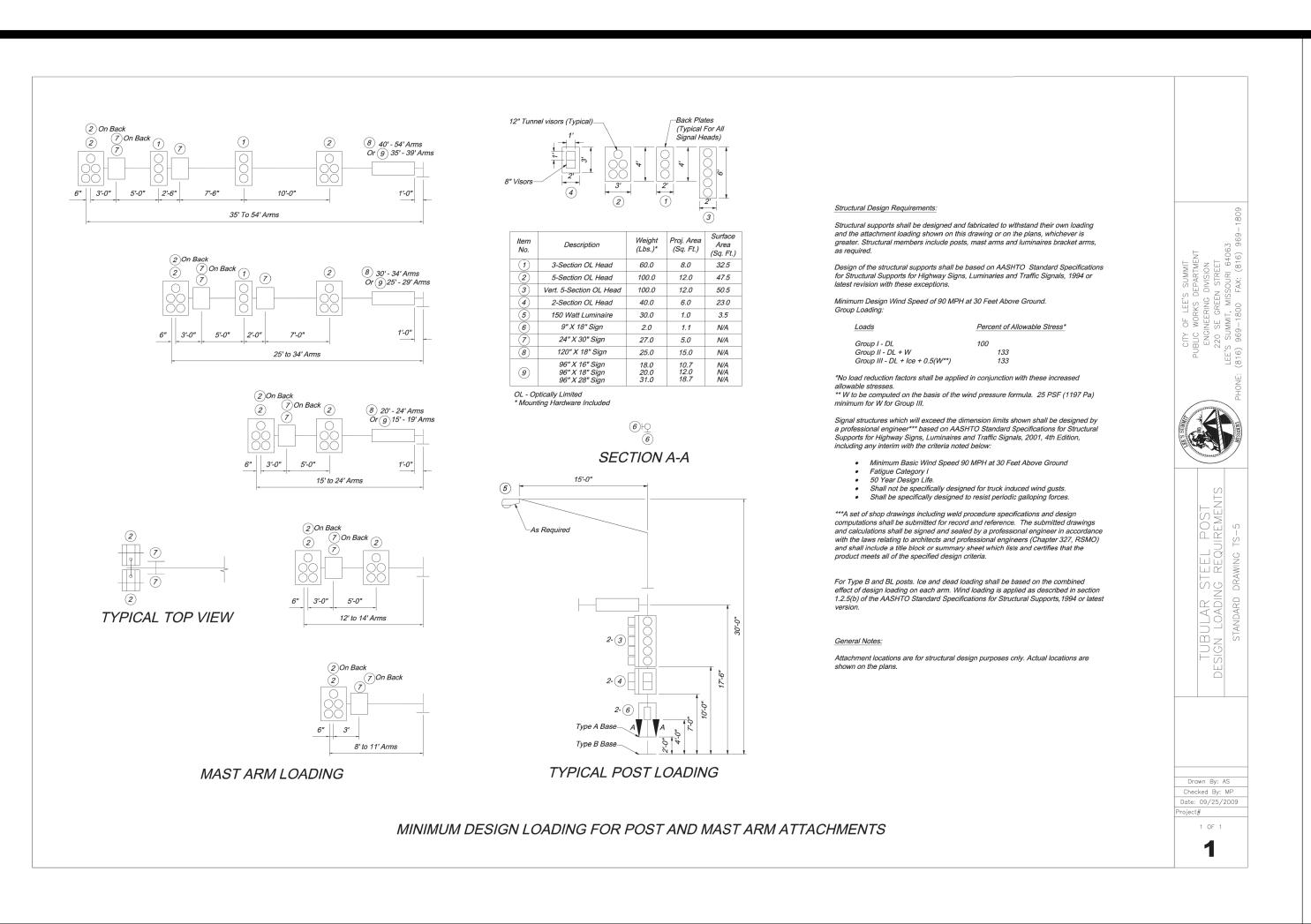
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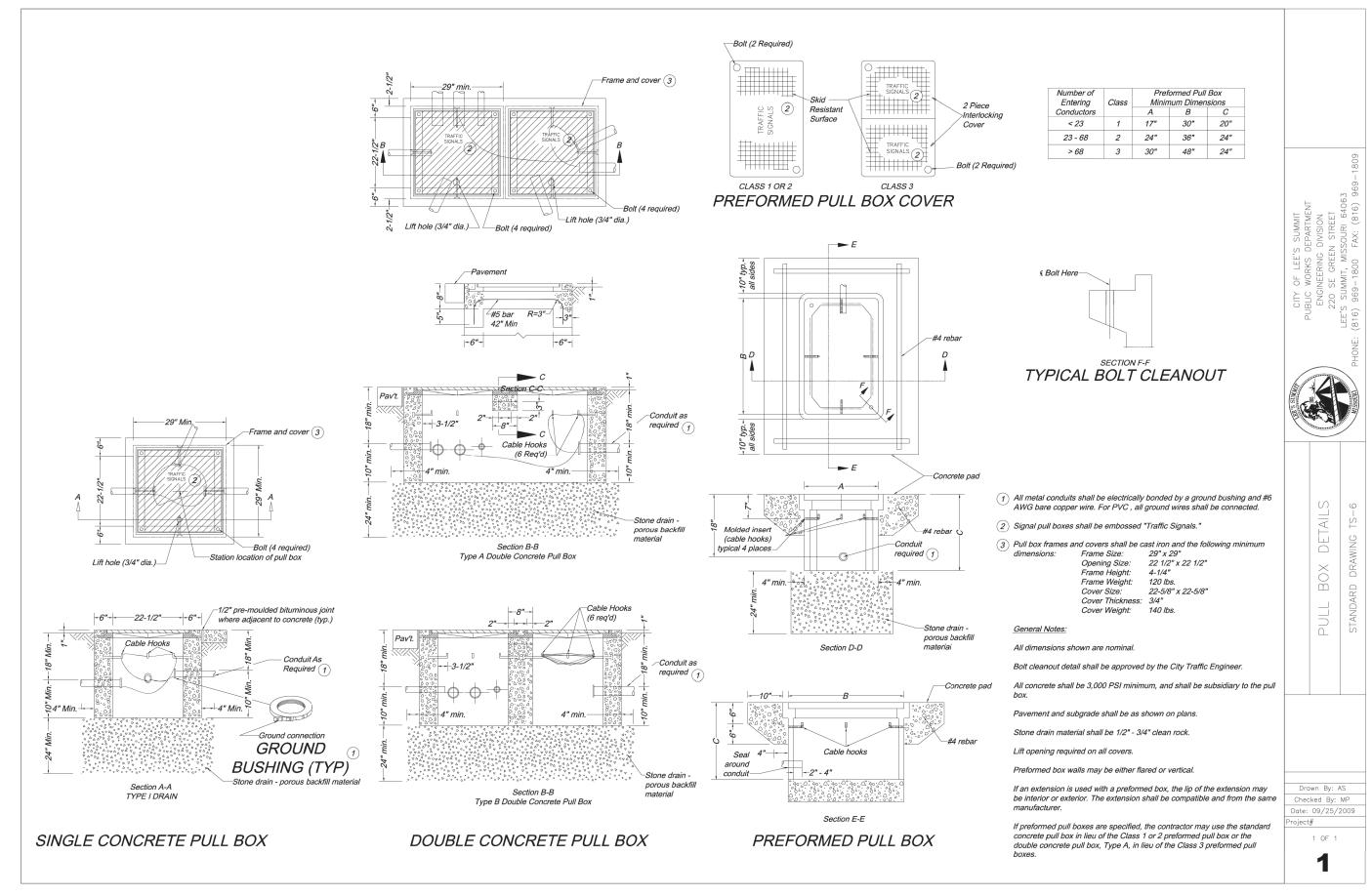
REVISED PER CITY COMMENT

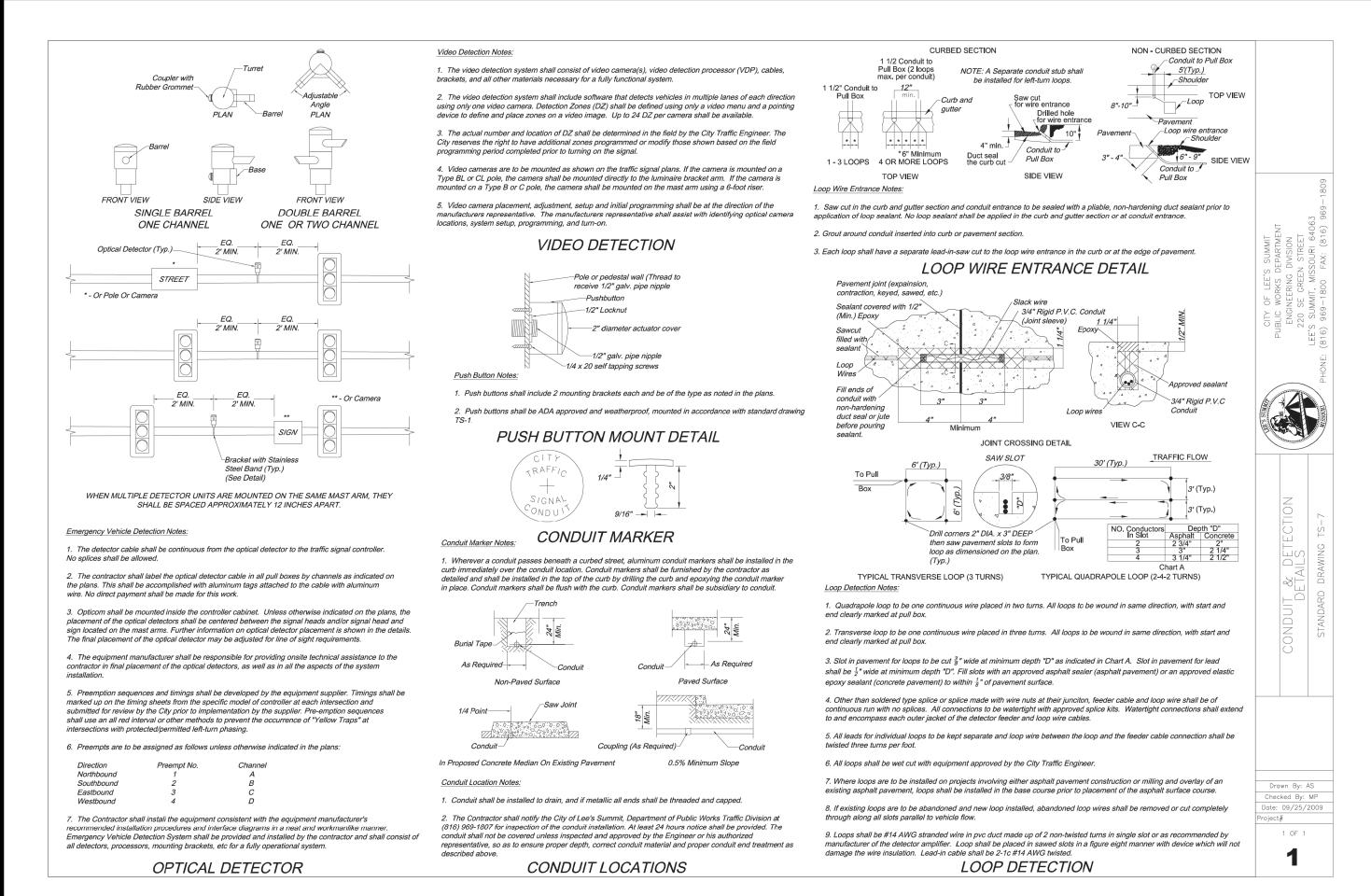
REVISED

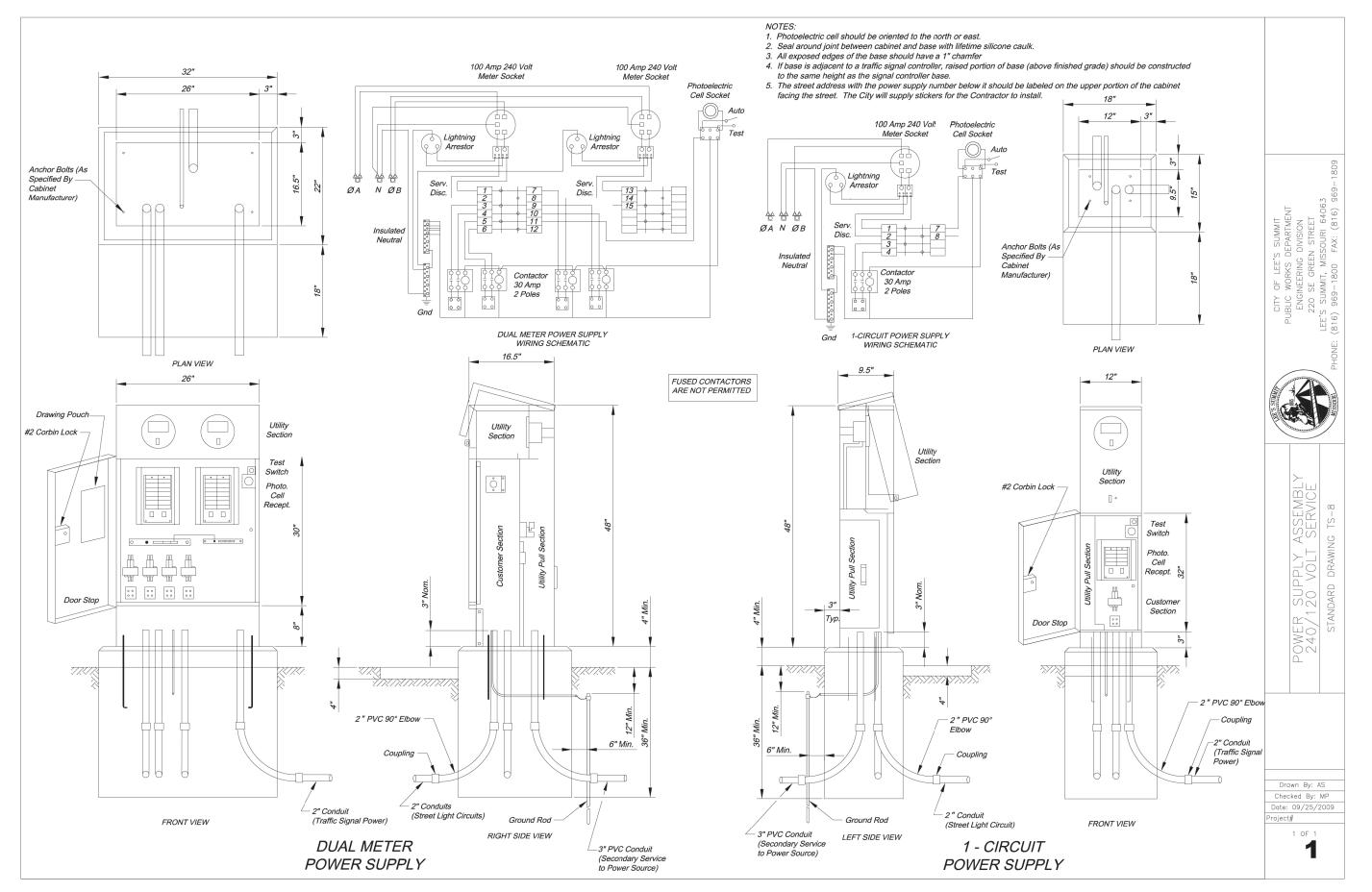


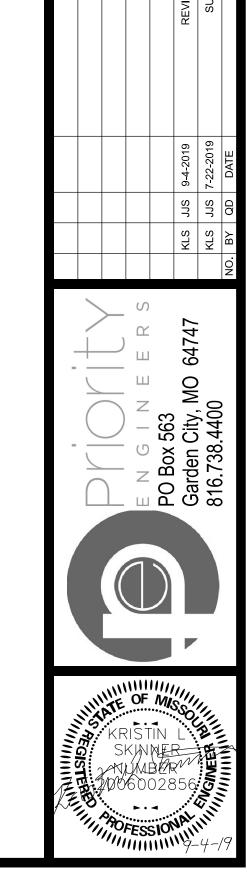












Sheet

10 of 11

Plan

Signal

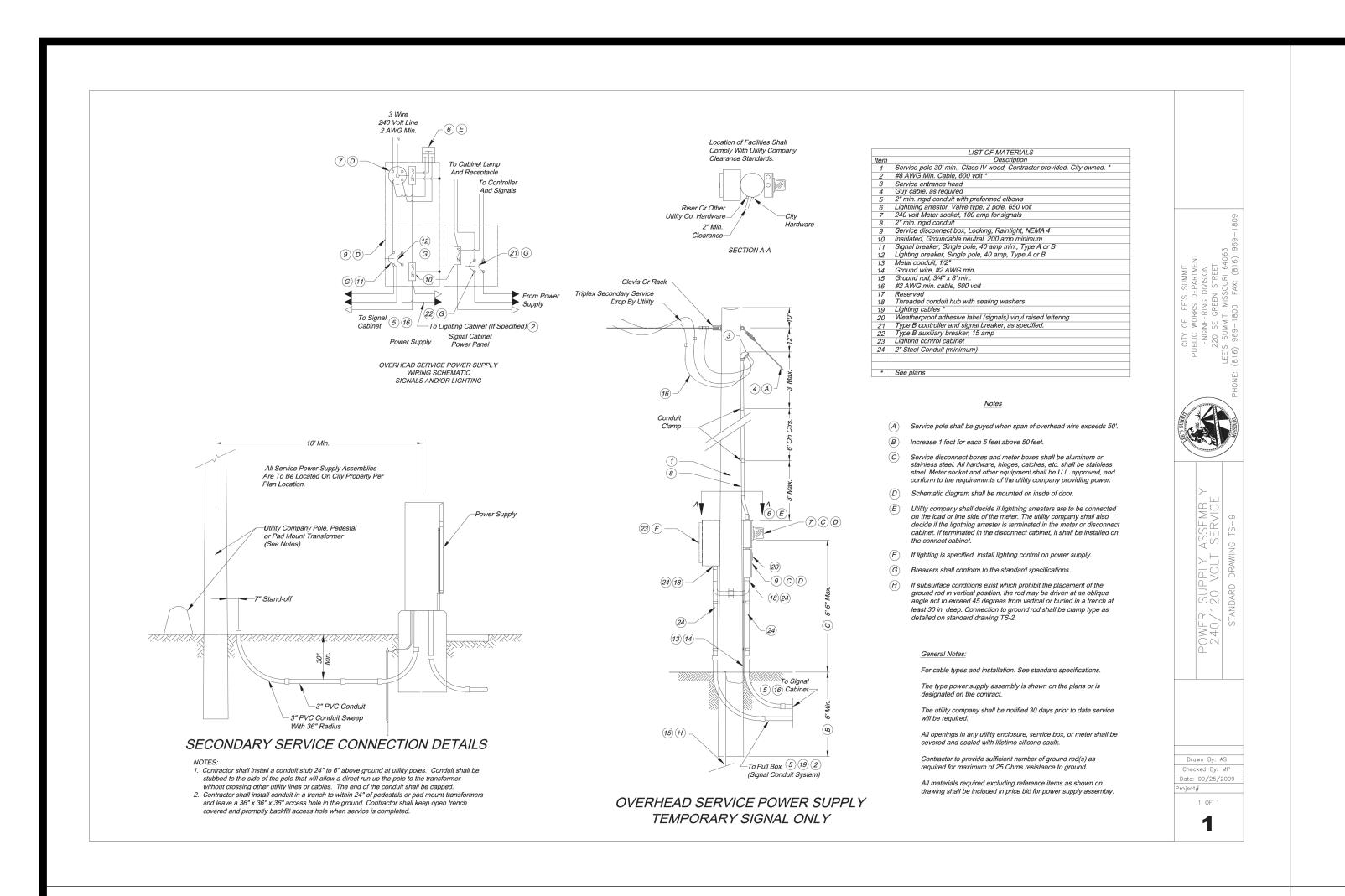
Traffic

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Chip

502 Details

TC Signal



Sheet

11 of 11

Traffic Signal Plans Chipman Road & Donovan Road Lee's Summit, Missouri

> TC503 Signal Details

					KLS JJS 9-4-2019 REVISED PER CITY COMME	KLS JJS 7-22-2019 SUBMITTED FOR REVIEW	NO. BY QD DATE REVISION
_	\ \ \	<u></u>	N N N	33	tv. MO 64747	400	