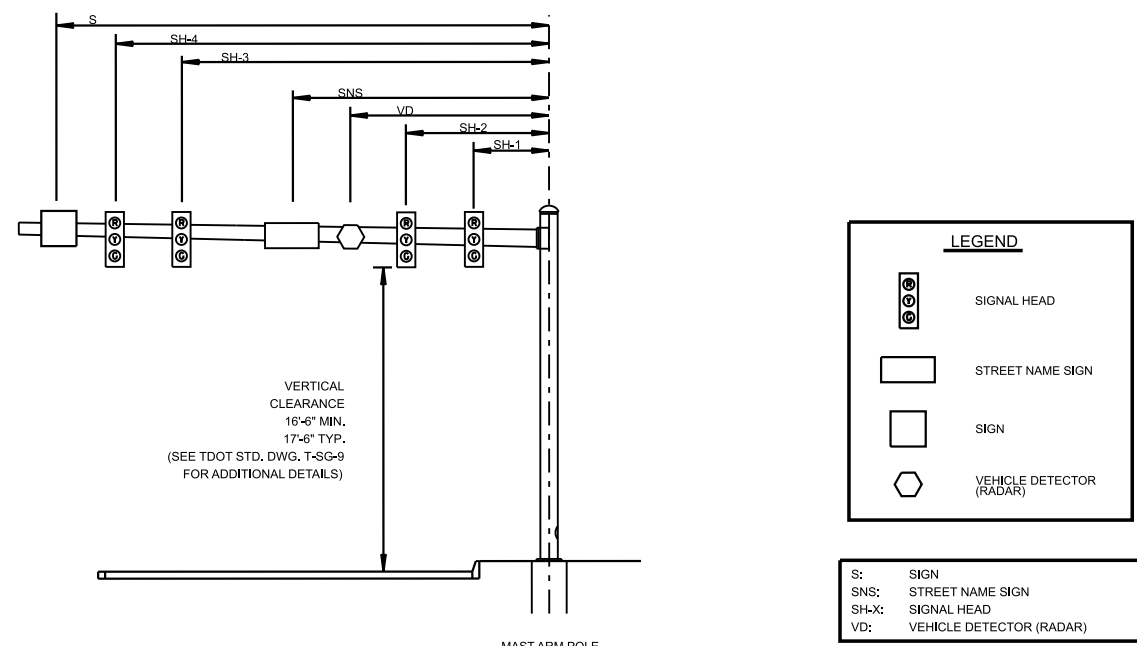
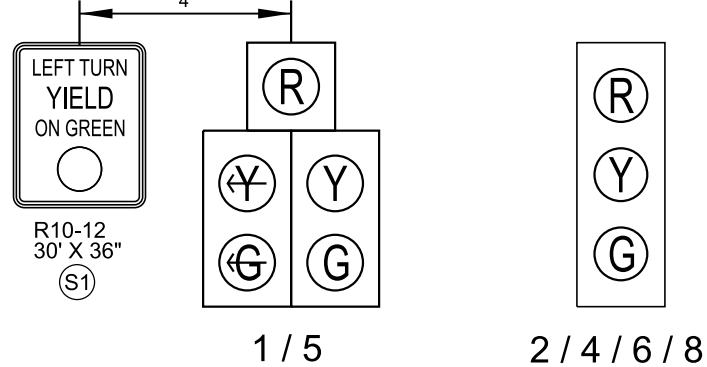


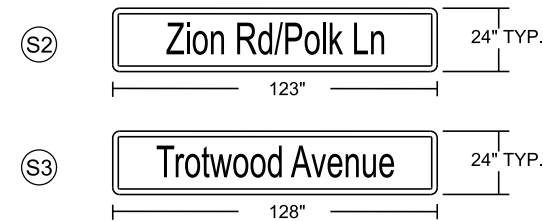
MAST ARM DETAILS
N.T.S.



PROPOSED TRAFFIC SIGNAL HEADS
*SIGNAL HEADS SHALL HAVE BACKPLATES

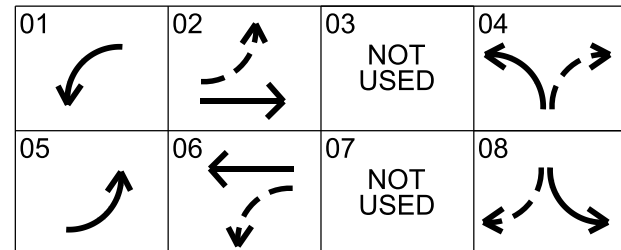


OVERHEAD STREET NAME SIGN (SNS)



- NOTES:
- SNS LETTERING SHOWN FOR REFERENCE ONLY.
 - SNS SIZE AND LETTERING TO BE COORDINATED AND DETERMINED BY THE LOCAL MUNICIPALITY PRIOR TO FABRICATION AND INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE MUNICIPALITY FOR FABRICATION AND INSTALLATION OF THE SNS.

SIGNAL PHASING DIAGRAM



- NOTES:
- OPERATION IS DUAL ENTRY MODE, FULL SKIP CAPABILITY.
 - SINGLE DIRECTION, LAGGING LEFT TURN PHASES ARE NOT ALLOWED.
 - ALL SIGNAL DISPLAYS AND CLEARANCES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND TDOT STANDARDS.

NOTES:

- SIGNAL POLES MAY BE ADJUSTED UP TO 2 FEET TO AVOID CONFLICTS WITH UTILITIES AS APPROVED BY THE ENGINEER. CONTRACTOR SHALL VERIFY THE APPROPRIATE POLE LENGTH WHEN ADJUSTING POLE LOCATION.
- ALL SIGNAL POLES SHOULD BE LOCATED OUTSIDE THE CLEAR ZONE AND INSIDE THE RIGHT-OF-WAY PER TDOT STANDARDS.
- CONTRACTOR IS RESPONSIBLE FOR STAKING PROPOSED POLE LOCATION. THESE LOCATIONS MUST BE APPROVED BY THE CITY ENGINEER/COUNTY ENGINEER PRIOR TO WORK COMMENCING.
- ENSURE ALL OVERHEAD CLEARANCES ARE MET BASED ON THE NESC STANDARDS FOR OVERHEAD WIRES AND TDOT STANDARDS.
- COORDINATION WITH TDOT SHOULD BE MADE IF ANY RELOCATION OF OVERHEAD UTILITIES IS REQUIRED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND THE LOCAL ELECTRIC COMPANY TO DETERMINE THE EXACT LOCATION OF THE POWER SOURCE AND MOST DIRECT ROUTE TO SERVE THE CONTROLLER.
- ALL PROPOSED CONNECTIONS FOR THE SIGNAL HEAD WILL BE MADE UNDERGROUND.
- SIGNAL HEADS AND BACKPLATES MUST HAVE A CLEARANCE HEIGHT OF 17.5 FEET AS MEASURED FROM THE SURFACE OF THE ROADWAY BASED ON TDOT STANDARD DRAWING T-SG-9.
- ALL SIGNAL HEADS TO BE LED AND INSTALLED WITH BACKPLATES. THE TYPE OF SIGNAL HEADS TO BE DETERMINED BY THE CITY ENGINEER/COUNTY ENGINEER BASED ON THEIR CURRENT STANDARDS.
- SIGNAL HEAD PLACEMENT TO BE DETERMINED BASED ON TDOT STANDARD DRAWINGS T-SG-7C AND T-SG-7D.
- THE PROPOSED CONTROLLER WILL BE INSTALLED IN A PAD MOUNTED CABINET TO BE LOCATED IN THE NORTHWEST QUADRANT OF THE INTERSECTION AS SHOWN ON THE PLANS. THE CABINET LOCATION MUST BE APPROVED BY THE CITY ENGINEER/COUNTY ENGINEER PRIOR TO WORK COMMENCING.
- CABINET TYPE AND ALL NECESSARY MOUNTING HARDWARE TO BE DETERMINED BY THE CITY ENGINEER/COUNTY ENGINEER BASED ON THEIR CURRENT STANDARDS.
- INSTALL SIGNAL AHEAD (W3-3) SIGNS ALONG BOTH APPROACHES OF TROTWOOD AVENUE/MAIN STREET APPROX. 200 FEET IN ADVANCE OF THE TRAFFIC SIGNAL.
- REFER TO THE TDOT STANDARD DRAWINGS AND THE TDOT TRAFFIC DESIGN MANUAL FOR ADDITIONAL DETAILS.

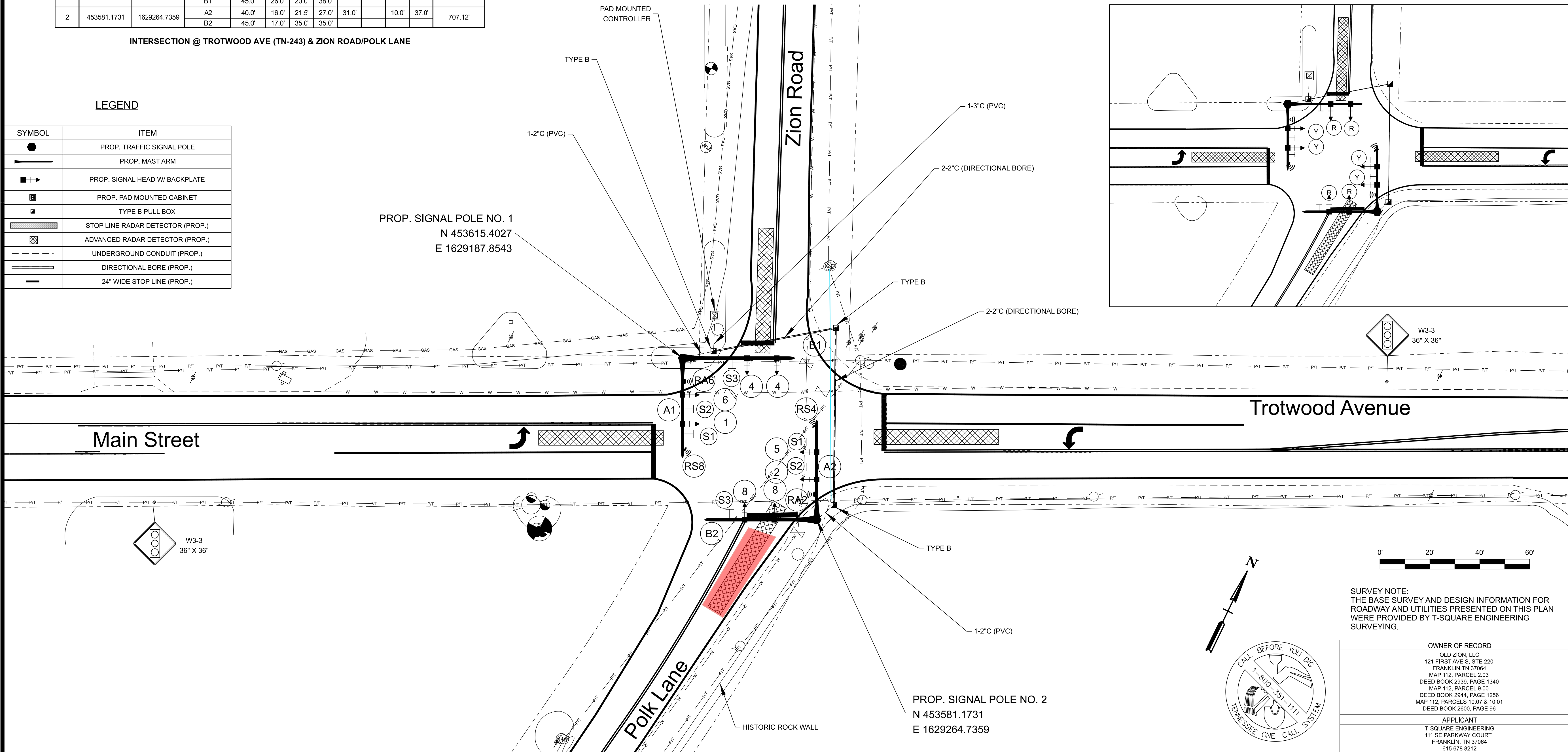
SIGNAL SUPPORT POLE DATA

SIGNAL SUPPORT POLE DATA AND MAST ARM DETAILS												
POLE NO.	NORTHING	EASTING	ARM	ARM LENGTH	SH-1	SNS	SH-2	S	SH-3	VD-1	VD-2	GROUND EL. @ POLE
1	453615.4027	1629187.8543	A1	40.0'	15.0'	21.0'	27.0'	31.0'		9.5'	36.0'	707.43'
			B1	45.0'	26.0'	20.0'	38.0'					
2	453581.1731	1629264.7359	A2	40.0'	16.0'	21.5'	27.0'	31.0'		10.0'	37.0'	707.12'
			B2	45.0'	17.0'	35.0'	35.0'					

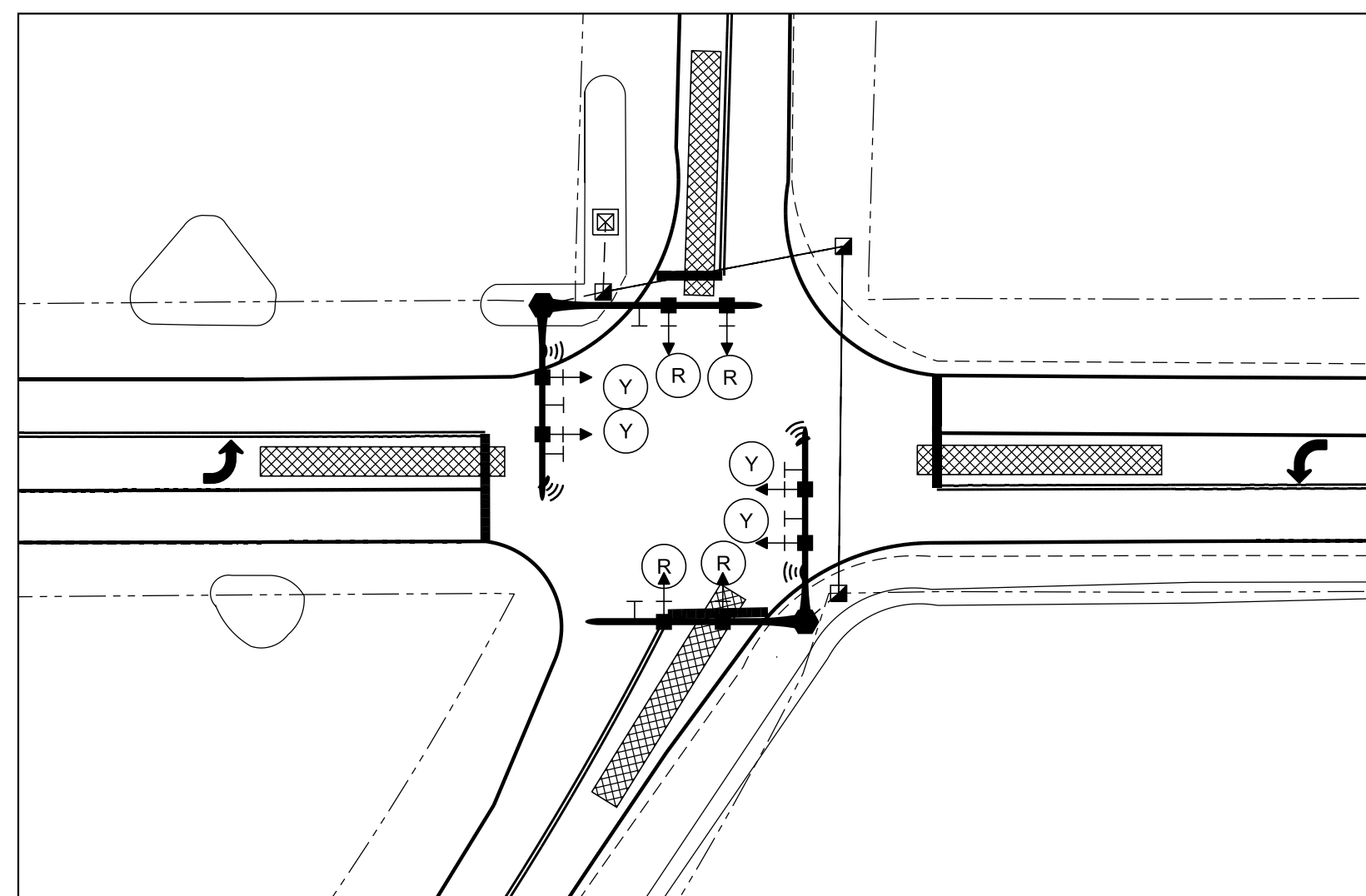
INTERSECTION @ TROTWOOD AVE (TN-243) & ZION ROAD/POLK LANE

LEGEND

SYMBOL	ITEM
	PROP. TRAFFIC SIGNAL POLE
	PROP. MAST ARM
	PROP. SIGNAL HEAD W/ BACKPLATE
	PROP. PAD MOUNTED CABINET
	TYPE B PULL BOX
	STOP LINE RADAR DETECTOR (PROP.)
	ADVANCED RADAR DETECTOR (PROP.)
	UNDERGROUND CONDUIT (PROP.)
	DIRECTIONAL BORE (PROP.)
	24' WIDE STOP LINE (PROP.)



FLASHING DIAGRAM



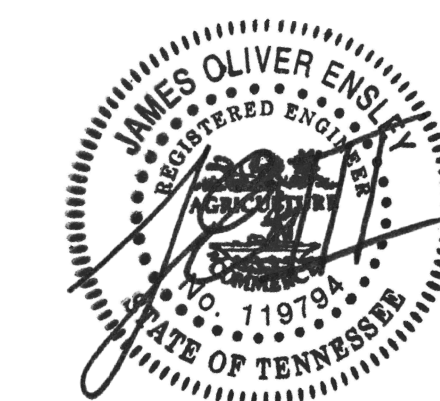
SURVEY NOTE:
THE BASE SURVEY AND DESIGN INFORMATION FOR ROADWAY AND UTILITIES PRESENTED ON THIS PLAN WERE PROVIDED BY T-SQUARE ENGINEERING SURVEYING.

OWNER OF RECORD	OLD ZION, LLC 121 FIRST AVE S, STE 220 FRANKLIN, TN 37064 MAP 112, PARCEL 2.03 DEED BOOK 2539, PAGE 1340 MAP 112, PARCEL 9.00 DEED BOOK 2944, PAGE 1206 MAP 112, PARCELS 10.07 & 10.01 DEED BOOK 2600, PAGE 96
APPLICANT	T-SQUARE ENGINEERING 111 SE PARKWAY COURT FRANKLIN, TN 37064 615-675-8212

SIGNAL DESIGN PLANS

TROTWOOD AVENUE AND ZION ROAD
MT. PLEASANT, MAURY COUNTY, TENNESSEE

THE PINES - PHASE 1A



9/25/25

PROJECT

23-1211

SHEET

S-1

BASIC OR SEMI-ACTUATED TIMINGS

TDOT STANDARD DRAWINGS

ESTIMATED ROADWAY QUANTITIES

BASIC OR SEMI-ACTUATED TIMINGS (SECS)									
PHASE	MINIMUM GREEN	PASSAGE TIME	MAX GREEN	CLEARANCE		RECALL TO	MEMORY POSITION	LEFT TURN OPEATION	
				YELLOW	ALL RED				
1	5	3	15	4	2	-	NL	PROT/PERM	
2	15	3.5	30	5	1	MIN.	-		
3	-	-	-	-	-	-	-	-	-
4	10	3	20	4.5	2	-	L	PERM	
5	5	3	15	4	2	-	NL	PROT/PERM	
6	15	3.5	30	5	1	MIN.	-		
7	-	-	-	-	-	-	-	-	-
8	10	3	20	4.5	2	-	L	PERM	

NOTE:
TIMINGS ARE INITIAL AND SHOULD BE REVIEWED AND/OR ADJUSTED BY THE CONTRACTOR/MUNICIPALITY BASED ON FIELD OBSERVATIONS AND DATA COLLECTION PRIOR TO IMPLEMENTATION.

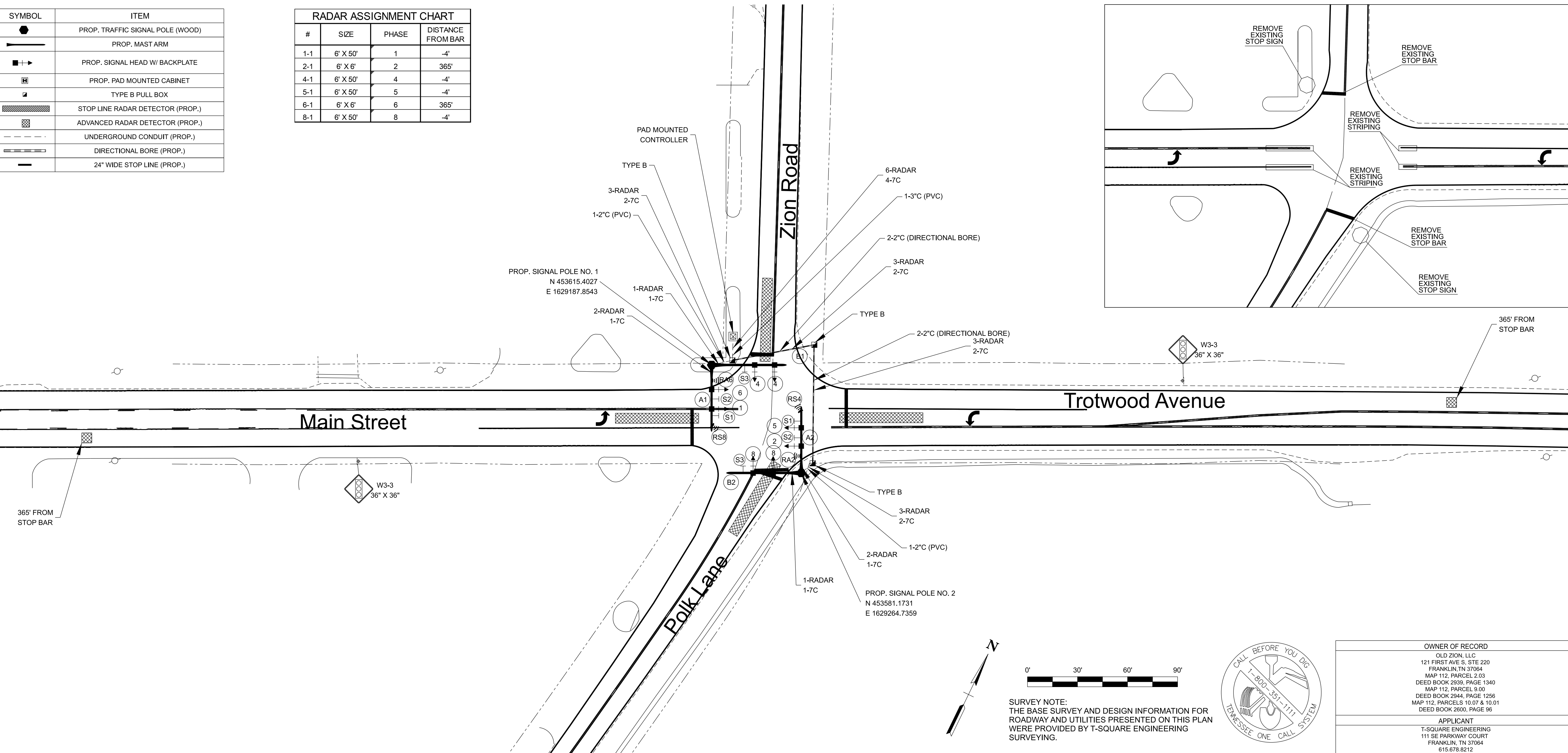
LEGEND
NL = NON LOCK
L = LOCK
PERM = PERMITTED
PROT = PROTECTED
P/P = PROT/PERM

LEGEND

SYMBOL	ITEM
	PROP. TRAFFIC SIGNAL POLE (WOOD)
	PROP. MAST ARM
	PROP. SIGNAL HEAD W/ BACKPLATE
	PROP. PAD MOUNTED CABINET
	TYPE B PULL BOX
	STOP LINE RADAR DETECTOR (PROP.)
	ADVANCED RADAR DETECTOR (PROP.)
	UNDERGROUND CONDUIT (PROP.)
	DIRECTIONAL BORE (PROP.)
	24" WIDE STOP LINE (PROP.)

LEGEND

RADAR ASSIGNMENT CHART			
#	SIZE	PHASE	DISTANCE FROM BAR
1-1	6' X 50'	1	-4'
2-1	6' X 6'	2	365'
4-1	6' X 50'	4	-4'
5-1	6' X 50'	5	-4'
6-1	6' X 6'	6	365'
8-1	6' X 50'	8	-4'



ITEM NO.	DESCRIPTION	UNIT	QUANTITY
TROTWOOD ROAD AND ZION ROAD			
712-01	TRAFFIC CONTROL	LS	1
713-14.21	STREET NAME SIGN (RIGID 0.100IN THICK	S.F.	90
713-16.20	SIGNS (W3-3, 36" X 36")	EACH	2
713-16.21	SIGNS (R10-12, 30" X 36")	EACH	2
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	85
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	120
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	50
717-01	MOBILIZATION	LS	1
730-02.09	SIGNAL HEAD ASSEMBLY (150 WITH BACKPLATE)	EACH	6
730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	2
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	3
730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	800
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	60
730-12.03	CONDUIT 3" DIAMETER (PVC SCHEDULE 40)	L.F.	25
730-12.23	CONDUIT 2" DIAMETER (DIRECTIONAL BORE)	L.F.	250
730-12.30	TRENCHING	L.F.	40
730-13.12	VEHICLE DETECTOR (RADAR - STOP BAR)	EACH	4
730-13.13	VEHICLE DETECTOR (RADAR - ADVANCE)	EACH	2
730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	1
730-16.14	CONTROLLER (ATC)	EACH	1
730-16.25	INSTALLATION OF CABINET AND CONTROLLER	EACH	1
730-16.50	CONFLICT MONITOR	EACH	1
730-23.87	CANTILEVER SIGNAL SUPPORT (2 @ 40' & 45')	EACH	2

REVISIONS

DATE

NO.

DATE: 09/25/2025

SCALE:

DRAWN BY:

T-SQUARE

REVIEWER:

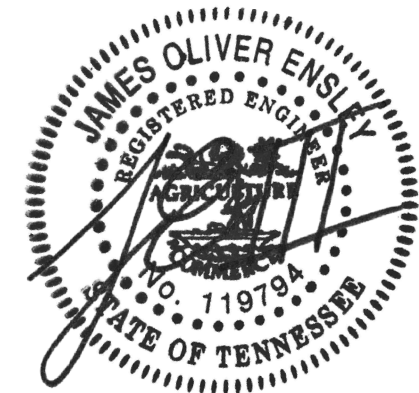
JDE

SIGNAL WIRING DIAGRAM AND DETAILS

TROTWOOD AVENUE AND ZION ROAD

MT. PLEASANT, MAURY COUNTY, TENNESSEE

THE PINES - PHASE 1 A



9/25/25

PROJECT

23-1211

SHEET

S-2