

CONSTRUCT: FOUNDATION, TYPE STF, STA: 9+12.2, OFFSET: 32.5'L, POLE 4
 INSTALL: TSS, TYPE S
 TSA, TYPE 3SS-2
 TSA, TYPE MM-1
 (2) PSA, W-1
 PPB & R10-3e(R)
 MASTARM SIGN A
 VIDEO CAMERA A

CONSTRUCT: 4" RNMC, TYPE CUG
 INSTALL: S-5/C, T-5/C, U-5/C, V-5/C, W-5/C,
 X-2/C, VIDEO WIRE, 1-1/C#8(GND)

CONSTRUCT: 18"x36" JUNCTION BOX

CONSTRUCT: FOUNDATION, TYPE P-MC, CONCRETE SIDEWALK 4" THICK, STA: 9+37.6', OFFSET: 37'L
 INSTALL: METER CABINET, TYPE TL
 CONTROLLER 8 PHASE
 BATTERY BACK-UP SYSTEM W/GENERATOR CAPABILITY
 CABINET SKIRT

CONSTRUCT: (2) 4" RNMC, TYPE CUG
 INSTALL: A-5/C, B-5/C, C-5/C, D-2/C,
 E-5/C, F-5/C, G-5/C, H-5/C, I-5/C,
 J-2/C, K-5/C, L-5/C, M-5/C, N-5/C,
 O-5/C, P-5/C, Q-5/C, R-2/C,
 (3) VIDEO WIRE, 1-1/C#8(GND)

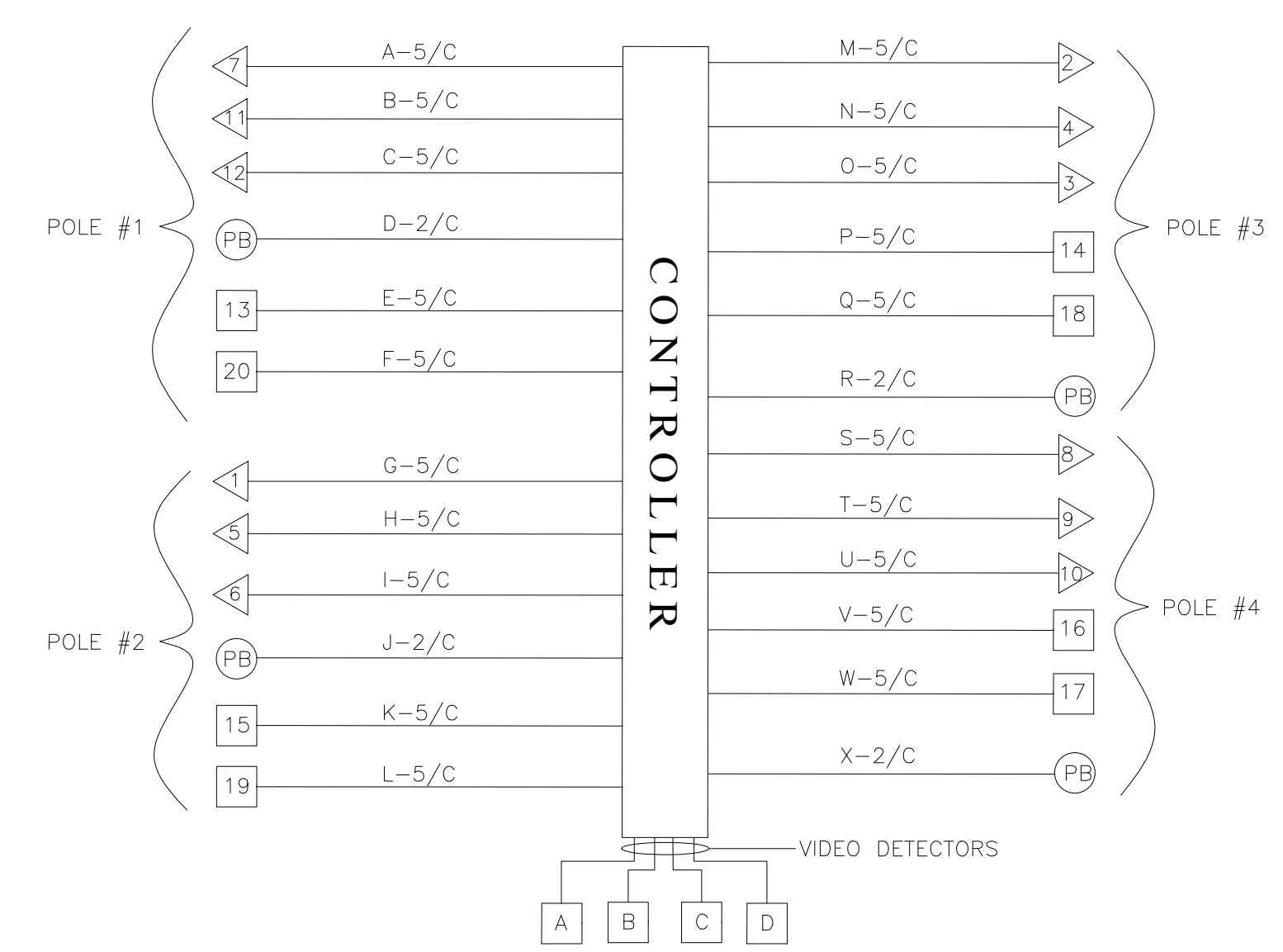
CONSTRUCT: (3) 4" RNMC, TYPE CUG
 INSTALL: A-5/C, B-5/C, C-5/C, D-2/C,
 E-5/C, F-5/C, G-5/C, H-5/C, I-5/C,
 J-2/C, K-5/C, L-5/C, M-5/C, N-5/C,
 O-5/C, P-5/C, Q-5/C, R-2/C, S-5/C,
 T-5/C, U-5/C, V-5/C, W-5/C, X-2/C,
 (4) VIDEO WIRE, 1-1/C#8(GND)

CONSTRUCT: 18"x36" JUNCTION BOX

CONSTRUCT: 2" RNMC SERVICE
 INSTALL: 3-1/6#6

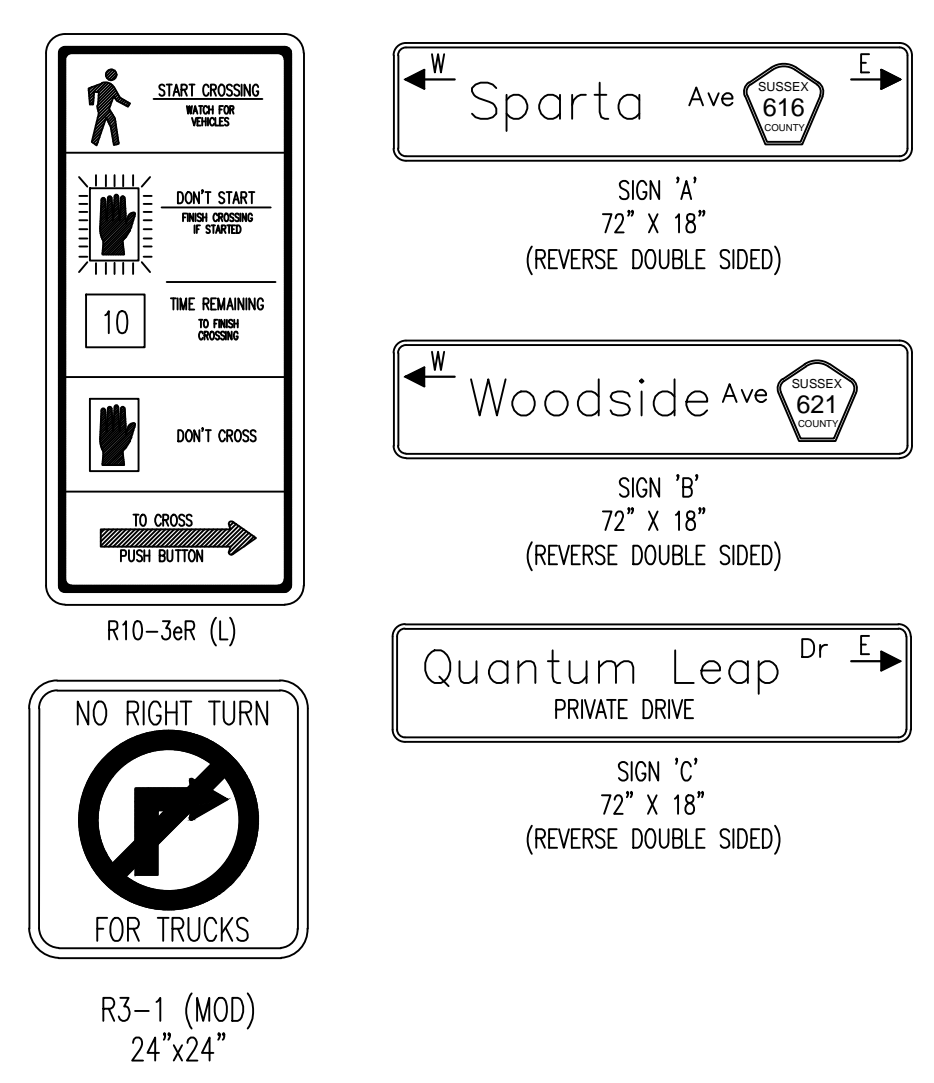
- NOTES:
- THESE TRAFFIC SIGNAL & ELECTRICAL CONSTRUCTION PLANS ACCOMPANY & WORK COLLABORATIVELY WITH THE PLAN SET ENTITLED "ROAD CONSTRUCTION AND TRAFFIC SIGNAL SC-32 PLANS FOR COUNTY ROUTE 616, COUNTY ROUTE 621 & QUANTUM LEAP DRIVE, TOWN OF NEWTON, SUSSEX COUNTY, NEW JERSEY" & DATED "5/13/20" PREPARED BY DYKSTRA WALKER DESIGN GROUP.
 - SUSSEX COUNTY TRAFFIC SIGNAL GENERAL SPECIFICATIONS, REVISED JANUARY 2020 GOVERN ALONG WITH NJDOT CURRENT STANDARD SPECIFICATIONS.
 - ALL EQUIPMENT REMOVED FROM SERVICE SHALL BE RETURNED TO THE SUSSEX COUNTY OFFICE OF BRIDGE & TRAFFIC SAFETY UNLESS OTHERWISE AUTHORIZED BY THE COUNTY ENGINEER.
 - ALL PERMANENT MARKINGS SHALL BE THERMOPLASTIC AND LANE LINES SHALL BE LONG LIFE EPOXY, 30 MIL MIN.
 - ALL SIGNAL HEADS TO INCLUDE BACKPLATES.
 - ALL OVER ROADWAY SIGNAL INDICATION HOUSINGS SHALL BE A MINIMUM OF 15'-6" OF CLEARANCE OF LOWEST POINT OF EQUIPMENT TO FINISH GRADE OF ROADWAY.
 - EACH JUNCTION BOX/SIGNAL POLE FOUNDATION SHALL HAVE (1) 10" GROUND ROD INSTALLED. ALL GROUND RODS SHALL BE INTERCONNECTED TO EACH OTHER WITH #6 AWG INSULATED COPPER WIRE AND CONNECTED TO MAIN GROUND BAR IN CONTROLLER CABINET.
 - SHOP DRAWINGS FOR ALL SIGNAL EQUIPMENT MUST BE SUBMITTED TO THE SUSSEX COUNTY DIVISION OF ENGINEERING FOR REVIEW & APPROVAL PRIOR TO INSTALLATION AND ACCEPTANCE OF THE TRAFFIC SIGNAL.
 - PRIOR TO COMMENCING WORK ON NEW SIGNAL SYSTEM, THE SIGNAL CONTRACTOR SHALL SUBMIT A PROCEDURE AND SCHEDULE DETAILING THE INSTALLATION OF THE NEW SIGNAL SYSTEM, MAINTENANCE OF THE EXISTING SIGNAL SYSTEM DURING CONSTRUCTION, TRANSITION TO THE NEW SIGNAL SYSTEM, AND REMOVAL OF THE OLD SYSTEM FOR APPROVAL BY THE DESIGN ENGINEER AND COUNTY OF SUSSEX.

BLOCK WIRING DIAGRAM

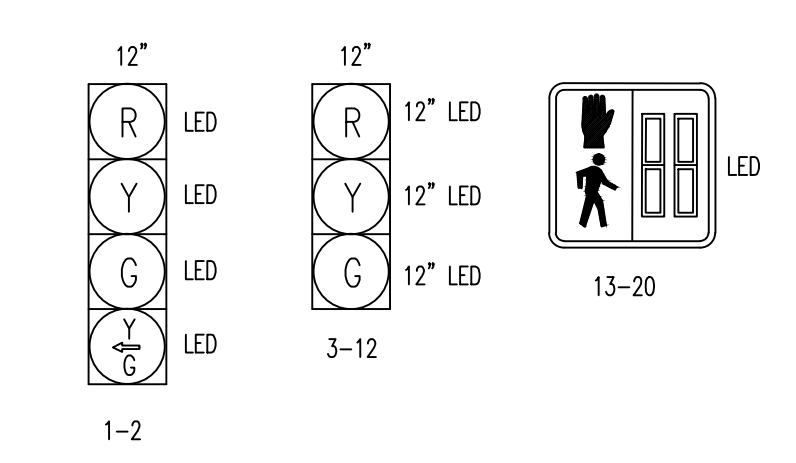


TO BE CONSTRUCTED	CONTRACT QTY.
18" X 36" JUNCTION BOX	5 UNITS
FOUNDATION TYPE, STF	1 UNIT
FOUNDATION TYPE, SFK	2 UNITS
TSS, TYPE S	1 UNIT
TSS, TYPE K	3 UNITS
TSA, TYPE 3SS-2	1 UNIT
TSA, TYPE 2SMK-2	3 UNITS
TSA, TYPE MM-1	4 UNITS
TSA, TYPE W-1	8 UNITS
VIDEO DETECTORS	4 UNITS
VIDEO DETECTION SYSTEM	1 UNIT
PBA, R10-3e (L OR R)	4 UNITS
MAST ARM SIGN	4 UNITS
4" RNMC, TYPE CUG	95 L.F.
4" RNMC, TYPE CUR	530 L.F.
2" RNMC, TYPE CUG	26 L.F.
1-1/2" RNMC, TYPE CUG	26 L.F.
SIGNAL CABLE 5/C	3825 L.F.
SIGNAL CABLE 2/C	815 L.F.
1-1/C#8(GND)WIRE	560 L.F.
VIDEO DETECTOR WIRE	820 L.F.
SERVICE: 1/C#6	100 L.F.
COMMUNICATIONS WIRE	36 L.F.
FOUNDATION, TYPE P-MC	1 UNIT
METER CABINET, TYPE TL	1 UNIT
CONTROLLER ASSEMBLY, 8 PHASE	1 UNIT
BATTERY BACKUP SYSTEM	1 UNIT

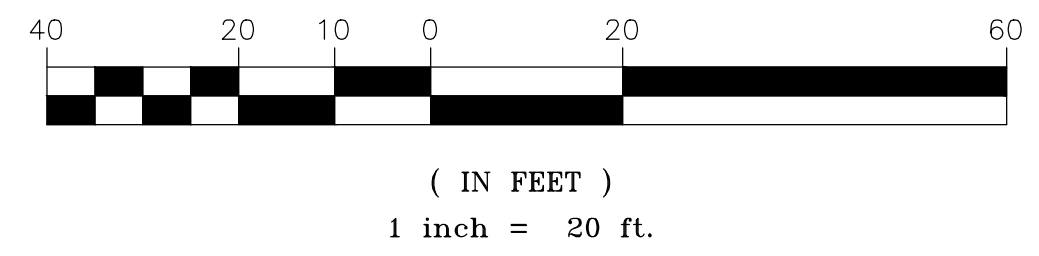
SIGN LEGEND



SIGNAL LEGEND



GRAPHIC SCALE



No.	Revision	Date
3	PER COUNTY COMMENTS	8/3/20
2	PER COUNTY COMMENTS	7/8/20
1	PER COUNTY COMMENTS	5/13/20

DOLAN & DEAN
 CONSULTING ENGINEERS, LLC
 181 WEST HIGH STREET
 SOMERVILLE, NJ 08876
 908-927-0100
 908-927-0181 Facsimile

NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 246A28113900

ELECTRICAL CONSTRUCTION PLAN

SPARTA AVENUE (CR 616),
 WOODSIDE AVE (CR 621) & QUANTUM LEAP DR
 TOWN OF NEWTON
 SUSSEX COUNTY, NEW JERSEY

GARY W. DEAN
 N.J. PROFESSIONAL ENGINEER NO.: GE 33722

Scale: 1"=20'
 Drawn by: JRS
 Checked by: GWD
 Date: 04/10/20
 Sheet T-2