



Putting Essex County First

**COUNTY OF ESSEX
DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE COUNTY ENGINEER
PLANS FOR
VALLEY ST (CR-638) – 11 INTERSECTIONS
TOWNSHIP OF MAPLEWOOD
TOWNSHIP OF SOUTH ORANGE VILLAGE**

**FEDERAL PROJECT JOB NO. D00S740 CON
STATE JOB NUMBER 6100350**

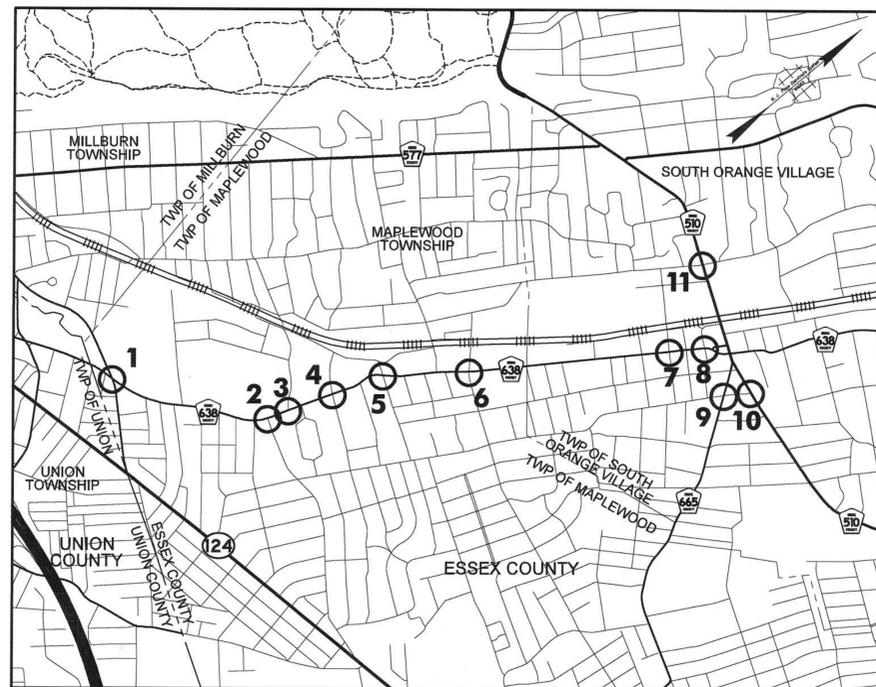
BID NUMBER 24-012

CHANGES MADE TO THESE PLANS SINCE SIGNATURE BY THE CONSULTANT MAY BE DETERMINED BY COMPARISON OF THE PLANS FILED AT THE COUNTY WITH THOSE FILED AT THE OFFICE OF THE CONSULTANT.

BY: *Andrew M. Muldowney*
ANDREW M. MULDOWNEY
P.E., N.J. LIC. NO. 35760

UTILITIES	
PUBLIC SERVICE ELECTRIC & GAS COMPANY 973-365-2828	ELECTRIC
PUBLIC SERVICE ELECTRIC & GAS COMPANY 973-414-6944	GAS
VERIZON 973-925-1489	TELEPHONE
JOINT MEETING OF ESSEX AND UNION COUNTIES 908-353-1313	SANITARY SEWER
TOWNSHIP OF SOUTH ORANGE VILLAGE DEPARTMENT OF PUBLIC WORKS 973-733-3985	SEWER, STORMWATER
TOWNSHIP OF MAPLEWOOD DEPARTMENT OF PUBLIC WORKS 973-762-1175	SEWER, STORMWATER
NEW JERSEY AMERICAN WATER 201-320-4721	WATER
CABLEVISION (ALTICE USA) 516-803-2785	CABLE TV

INDEX OF DRAWINGS	
SHEET NO.	
1	TITLE SHEET & KEY PLAN
2 - 3	ESTIMATION AND DISTRIBUTION OF QUANTITIES
4	LEGEND & GENERAL NOTES
5 - 16	EXISTING CONDITIONS PLANS
17 - 28	CONSTRUCTION PLANS
29 - 40	GRADING PLANS
41 - 52	TRAFFIC SIGNING & STRIPING PLANS
53 - 63	TRAFFIC SIGNAL PLAN
64 - 75	ELECTRICAL PLAN
76 - 78	PEDESTRIAN TRAFFIC CONTROL
79 - 81	CONSTRUCTION DETAILS
82 - 90	ELECTRICAL DETAILS
91 - 92	TIMING DIRECTIVES



KEY MAP
SCALE: 1" = 1500'
NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARDS SPECIFICATIONS OF 2019 TO GOVERN.
NEW JERSEY DEPARTMENT OF TRANSPORTATION ROADWAY CONSTRUCTION/TRAFFIC CONTROL/BRIDGE CONSTRUCTION DETAILS BOOKLET DATED 2016 AND STANDARD ELECTRICAL DETAILS 2007 ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

INTERSECTION NUMBER	LOCATION
1	VALLEY ST (CR-638) & MILLBURN AVE (CR-630) TOWNSHIP OF MAPLEWOOD
2	VALLEY ST (CR-638) & TUSCAN RD TOWNSHIP OF MAPLEWOOD
3	VALLEY ST (CR-638) & BAKER ST TOWNSHIP OF MAPLEWOOD
4	VALLEY ST (CR-638) & OAKVIEW AVE TOWNSHIP OF MAPLEWOOD
5	VALLEY ST (CR-638) & OAKLAND RD TOWNSHIP OF MAPLEWOOD
6	VALLEY ST (CR-638) & PARKER AVE TOWNSHIP OF MAPLEWOOD
7	VALLEY ST (CR-638) & 3RD ST TOWNSHIP OF SOUTH ORANGE VILLAGE
8	VALLEY ST (CR-638) & 1ST ST TOWNSHIP OF SOUTH ORANGE VILLAGE
9	IRVINGTON AVE (CR-665) & PROSPECT ST TOWNSHIP OF SOUTH ORANGE VILLAGE
10	SOUTH ORANGE AVE (CR-510) & PROSPECT ST TOWNSHIP OF SOUTH ORANGE VILLAGE
11	SOUTH ORANGE AVE (CR-510) & RIDGEWOOD RD TOWNSHIP OF SOUTH ORANGE VILLAGE

APPROVED BY *Joe D. Vincenzo* 10/26/2023
ESSEX COUNTY EXECUTIVE DATE

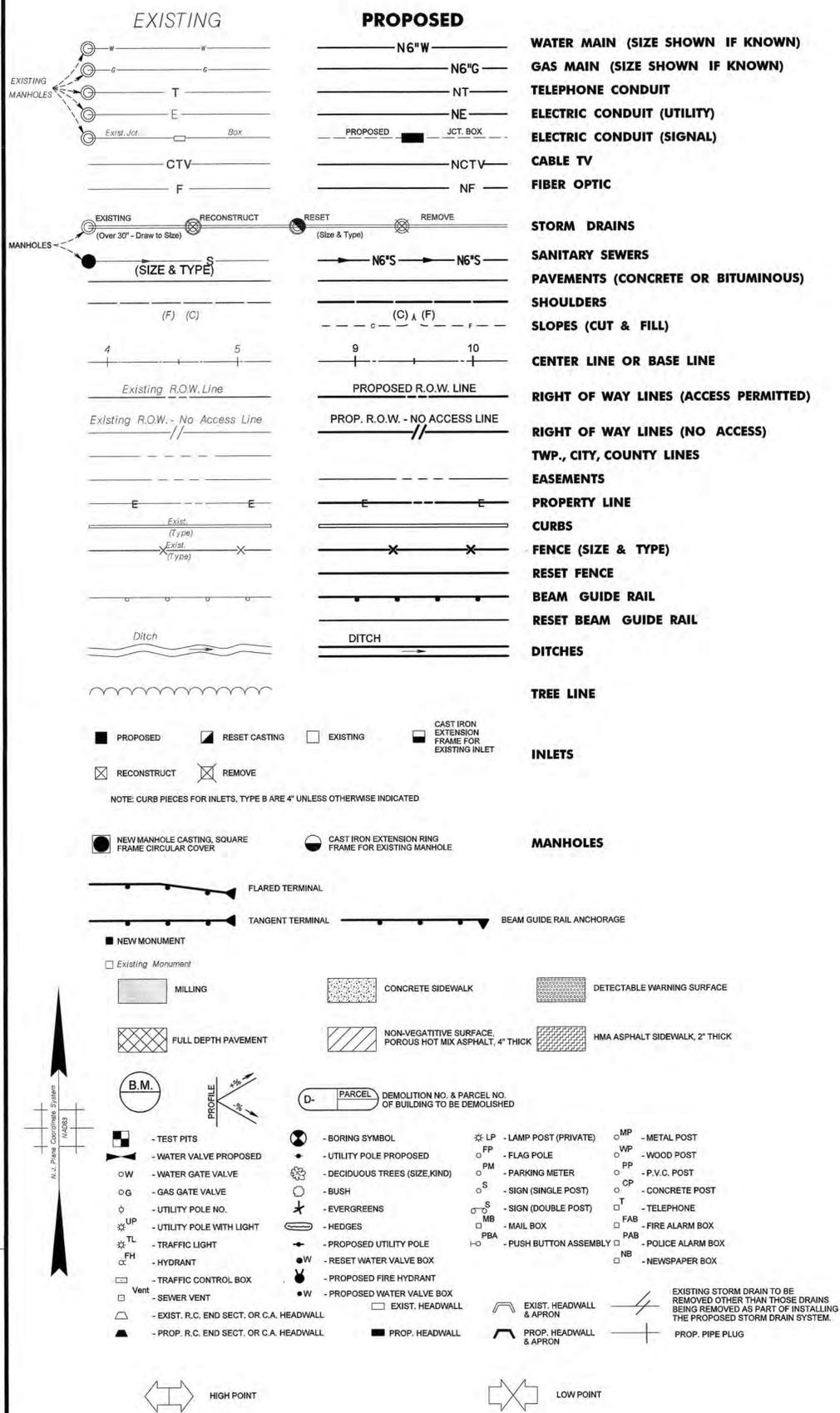
APPROVED BY *S. Varghese* 10/26/2023
SANJEEV VARGHESE, P.E. DATE
ESSEX COUNTY ENGINEER

PREPARED AND RECOMMENDED FOR APPROVAL BY *Andrew M. Muldowney* 10/26/2023
ANDREW M. MULDOWNEY, N.J.P.E. NO. 35760 DATE
NV5, INC., PARSIPPANY, N.J.



800 Lanidex Plaza, Suite 300, Parsippany, New Jersey 07054
Phone (973) 946-5600, Fax (973) 898-9472
CERTIFICATION OF AUTHORIZATION # 24GA27930500

STANDARD LEGEND



GENERAL NOTES

- CONTRACTOR SHALL TRANSITION PROPOSED CURB AND SIDEWALK TO MEET EXISTING CONDITIONS IN 10 FEET.
- ALL EXISTING TREES WITHIN THE PROPOSED SIDEWALK AREA DETERMINED TO BE IN GOOD CONDITION BY THE ENGINEER, SHALL REMAIN IN PLACE AND BE UNDISTURBED BY PROPOSED CONSTRUCTION.
- UTILITY BOXES, OIL FILL CAPS, GAS AND WATER VALVES WITHIN THE PROPOSED SIDEWALK RECONSTRUCTION, SHALL BE RESET AS REQUIRED TO CONFORM TO PROPOSED FINISHED GRADE.
- EXISTING UTILITY FACILITIES ARE SHOWN ON THE PLANS BASED ON INFORMATION SUPPLIED BY THE UTILITY COMPANIES. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN UTILITY MARK-OUTS AND OPEN MANHOLES AND INLET GRATES TO VERIFY THEIR LOCATION, PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR WILL PERFORM TEST PITS WHERE THERE IS A POSSIBLE CONFLICT BETWEEN PROPOSED EQUIPMENT AND EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES 72 HOURS IN ADVANCE OF CONSTRUCTION TO COORDINATE ANY SCHEDULING OF WORK. THE UTILITY COMPANIES WILL RELOCATE OR RESET THEIR FACILITIES AFFECTED BY THE NEW CONSTRUCTION.
- EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED BY THE CONTRACTOR SHALL BE RETURNED TO THE COUNTY AS SPECIFIED IN THE SUPPLEMENTARY SPECIFICATIONS.
- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- THE PROPOSED STRIPING SHALL MEET THE EXISTING STRIPING AT THE PROJECT LIMITS.
- THE CONTRACTOR SHALL ATTEMPT TO MAINTAIN THE EXISTING SIGNALS IN OPERATION AT ALL TIMES. IF THE EXISTING SIGNAL OPERATION IS EXTINGUISHED DURING NON-WORKING HOURS DUE TO THE CONTRACTOR'S WORK, THE CONTRACTOR SHALL PROVIDE AN INTERIM TRAFFIC SIGNAL SYSTEM AS APPROVED BY THE ENGINEER (i.e. TEMPORARY WIRING, SIGNAL HEADS, POLES, ETC.) AT NO ADDITIONAL COST TO THE COUNTY IN ORDER TO MAINTAIN THE NORMAL SIGNAL OPERATION. THE USE OF TRAFFIC DIRECTORS WILL NOT BE ALLOWED DURING NON-WORKING HOURS, UNLESS APPROVED BY THE ENGINEER. NO SEPARATE PAYMENT WILL BE MADE. THE COST OF PERFORMING THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS ELECTRICAL ITEMS.
- THE COST FOR THE REMOVAL OF ANY EXISTING TRAFFIC SIGNAL EQUIPMENT (INCLUDING EXCAVATION BACKFILL AND SURFACE RESTORATION) SHALL BE INCLUDED IN THE PRICE BID FOR THE PAY ITEM "CLEARING SITE". REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT FOUNDATIONS IS TO BE A MINIMUM OF 1 FOOT BELOW EXISTING GRADE.
- THE LOCATIONS AT WHICH THE PROPOSED JUNCTION BOXES WILL BE CONSTRUCTED SHALL BE APPROVED BY THE ENGINEER, PRIOR TO THEIR CONSTRUCTION.
- THE PROPOSED SIGNING AND STRIPING SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS. IF DIMENSIONS EXIST THEY SHALL GOVERN OVER THE SCALED MEASUREMENT.
- ALL FINAL PAVEMENT MARKING SHALL BE THERMOPLASTIC.
- ALL TRAFFIC SIGNS SHALL BE INSTALLED BY THE CONTRACTOR SO THAT THEY DO NOT OBSCURE EACH OTHER OR ARE HIDDEN FROM VIEW BY OTHER ROADSIDE OBJECTS, AS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO EACH PROPERTY WITHIN THE CONSTRUCTION AREA DURING ALL WORKING AND NON-WORKING HOURS.
- ALL PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED AT 8' ABOVE THE GROUND, SIDEWALK, OR FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS.
- CLAMP-MOUNTED SIGNAL HEADS SHALL BE MOUNTED AT 12' ABOVE THE GROUND, SIDEWALK, OR FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS.
- THERE ARE NO KNOWN EXTENDED BASEMENTS UNDER SIDEWALK WHEN EXCAVATING FOR SIGNALS.
- THE CONTRACTOR SHALL REMOVE OR RELOCATE ALL EXISTING SIGNS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST FOR THE REMOVAL OR RELOCATION OF SIGNS SHALL BE INCLUDED IN THE PRICE BID FOR THE PAY ITEM "CLEARING SITE". IN ADDITION, ALL SIGNS REMOVED SHALL BE RETURNED TO ESSEX COUNTY AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING STRIPING WHICH CONFLICTS WITH PROPOSED STRIPING. EXISTING STOP LINES, CROSSWALK AND LANE LINES SHALL ONLY BE REMOVED WHERE NEW STOP LINES, CROSSWALK AND LANE LINES ARE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ACCESSIBLE PEDESTRIAN ACCESS SHALL BE MAINTAINED BY CONTRACTOR AT ALL TIMES.
- CONSTRUCTION ACTIVITIES ARE TO COMPLY WITH NJ STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
- CONSTRUCTION STAGING ACTIVITIES (INCLUDING STORAGE OF EQUIPMENT, VEHICLES AND CONSTRUCTION MATERIALS) ARE PROHIBITED IN ENVIRONMENTALLY SENSITIVE AREAS SUCH AS WETLANDS, FLOODPLAINS AND PARKLAND. IF THE CONTRACTOR WISHES TO USE THESE AREAS OR ACCESS THESE AREAS FOR ANY REASON, ALL APPROPRIATE PERMIT APPROVALS MUST BE OBTAINED PRIOR TO SUCH USE.
- IF THERE ARE ANY CHANGES TO THE PROPOSED ACTIVITIES, THEY MUST BE RE-EVALUATED BY NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT) BUREAU OF ENVIRONMENTAL PROGRAM RESOURCES (BEPR) TO DETERMINE THE NEED FOR ADDITIONAL REGULATORY COMPLIANCE.
- CONTRACTOR SHALL COMPLETE WORK WITH THE RIGHT-OF-WAY. ANY WORK COMPLETED BEYOND THE RIGHT-OF-WAY SHALL BE DOCUMENTED IN A LIST, IDENTIFIED BY PARCEL.
- DUE TO THE POTENTIAL FOR NORTHERN LONG-EARED BAT HABITAT, NO TREE REMOVAL OR TRIMMING SHALL OCCUR BETWEEN THE DATES OF APRIL 1 AND SEPTEMBER 30.

ABBREVIATIONS

AH., BK.	AHEAD, BACK	R	RADIUS
B.L.	BASELINE	RCCP, R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
B.B.	BELGIAN BLOCK	RCP, R.C.P.	REINFORCED CONCRETE PIPE
BGREA	BEAM GUIDE RAIL END ANCHORAGE	RMC, R.M.C.	RIGID METALLIC CONDUIT
B.M.	BENCH MARK	RNMC, R.N.M.C.	RIGID NON-METALLIC CONDUIT
B.T.	BELL TELEPHONE	ROW, R.O.W.	RIGHT OF WAY
BIT., BITUM.	BITUMINOUS	R.R.	RAILROAD
BLDG.	BUILDING	RTE., RT.	ROUTE
C.L.	CENTERLINE	SAN.	SANITARY
C.I.P.	CAST IRON PIPE	SDWK.	SIDEWALK
CRT	CONTROLLED RELEASE TERMINALS	S.H.D.	STATE HIGHWAY DEPARTMENT
C.M.P.	CORRUGATED METAL PIPE	SHLD.	SHOULDER
CONC.	CONCRETE	S.S.L.	SURVEY LINE
CULV.	CULVERT	S.O.D.	SUBBASE OUTLET DRAIN
D, DIA.	DIAMETER	STY.	STORY
DC	DROP CURB	T	TANGENT
DE	DITCH EXCAVATION	TGRT	TANGENT GUIDE RAIL TERMINAL
DEP., DP	DEPRESSED CURB	TBA	TO BE ABANDONED
DH	DRILL HOLE	TBR	TO BE REMOVED
DIP	DUCTILE IRON PIPE	TEL	TELEPHONE
DWY	DRIVEWAY	TEMP.	TEMPORARY
E.B., W.B., N.B., S.B.	EASTBOUND, WESTBOUND NORTHBOUND, SOUTHBOUND	THK., TH.	THICK
EL., ELEV.	ELEVATION	T.O.B.	TOP OF BASIN
EXIST.	EXISTING	TYP.	TYPICAL
FES	FLARED END SECTION	U.D.	UNDERDRAIN
FGRT	FLARED GUIDE RAIL TERMINAL	UP, U.P.	UTILITY POLE
FT.	FEET	VAR.	VARIABLE, VARIES
GR.	GRATE	W.C.V.C.	WHITE CONCRETE VERTICAL CURB
HERCCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE CULVERT PIPE	WM	WATER METER
HT.	HEIGHT	X-SECT	CROSS SECTION
H.W.	HEADWALL	N.T.S.	NOT TO SCALE
HYD.	HYDRANT	PAVT.	PAVEMENT
IN.	INCH	PERF.	PERFORATED
INV.	INVERT	P.G.L.	PROFILE GRADE LINE
IP	IRON PIN	P.L.	PROPERTY LINE, PROFILE LINE
J.B.	JUNCTION BOX	PK	PARKER KAYLON MASONRY NAIL
LT., RT.	LEFT, RIGHT	POC, P.O.C.	POINT ON CURVE
L.O.P.	LIMIT OF PAVEMENT (PAVING)	POL, P.O.L.	POINT ON LINE
L.O.M.	LIMIT OF MILLING	POT, P.O.T.	POINT ON TANGENT
L.O.R.	LIMIT OF RESURFACING	PRC, P.R.C.	POINT OF REVERSE CURVE
M.B.	MAILBOX	PROP.	PROPOSED
M.P.	MILE POST	PT, P.T.	POINT OF TANGENCY
MAX.	MAXIMUM	PVC, P.V.C.	POLYVINYL CHLORIDE PIPE
MH	MANHOLE	PVC, P.V.C.	POINT OF VERTICAL CURVATURE
MIN.	MINIMUM	PVI, P.V.I.	POINT OF VERTICAL INTERSECTION
NO.	NUMBER	PVT, P.V.T.	POINT OF VERTICAL TANGENCY, PAVEMENT

LGN-1
LGN-1

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

**TRAFFIC SIGNAL MODIFICATIONS
MAPLEWOOD & SOUTH ORANGE VILLAGE**

LEGEND AND GENERAL NOTES

SANJEEV VARGHESE, P.E. N.J. LICENSE NO. 40597
COUNTY ENGINEER DATE: _____

ANDREW MULDOWNY, P.E. N.J. LICENSE NO. 35760
PROFESSIONAL ENGINEER DATE: 10/26/23

DWG. NO. 4 SCALE NONE DATE OCT 2023

NVS, INC. 800 LANDEX PLAZA, SUITE 300
PARSIPPANY, NEW JERSEY 07054
PHONE (973) 946-5600, FAX (973) 984-5421
CERTIFICATION OF AUTHORIZATION # 24G27530200

FILE No. PROJECT No. 728621-0000770.00

REV.	DESCRIPTION	DATE	BY	CHK.

- CONSTRUCT**
- 32 LF SAWCUTTING
 - 180 SY HMA MILLING, 3" OR LESS
 - 23 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 15 GAL TACK COAT

- CONSTRUCT**
- 170 SY HMA MILLING, 3" OR LESS
 - 20 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 14 GAL TACK COAT

- CONSTRUCT**
- 25 SY CONCRETE SIDEWALK, 4" THICK
 - 5 SY DETECTABLE WARNING SURFACE
 - 56 LF BELGIAN BLOCK CURB
 - 64 SY TOPSOIL SPREADING, 5" THICK
 - 64 SY FERTILIZING AND SEEDING, TYPE A-3
 - 64 SY STRAW MULCHING

- CONSTRUCT**
- 38 LF SAWCUTTING
 - 810 SY HMA MILLING, 3" OR LESS
 - 96 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 66 GAL TACK COAT

- CONSTRUCT**
- 24 SY RESET BRICK PAVERS
 - 37 SY CONCRETE SIDEWALK, 4" THICK
 - 5 SY DETECTABLE WARNING SURFACE
 - 56 LF BELGIAN BLOCK CURB
 - 43 SY TOPSOIL SPREADING, 5" THICK
 - 43 SY FERTILIZING AND SEEDING, TYPE A-3
 - 43 SY STRAW MULCHING

- CONSTRUCT**
- 75 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
 - 15 SY HOT MIX ASPHALT DRIVEWAY, 2" THICK
 - 17 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

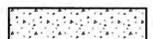
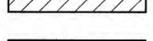
- CONSTRUCT**
- 20 LF SAWCUTTING
 - 305 SY HMA MILLING, 3" OR LESS
 - 36 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 26 GAL TACK COAT

- CONSTRUCT**
- 17 SY CONCRETE SIDEWALK, 4" THICK
 - 17 SY TOPSOIL SPREADING, 5" THICK
 - 17 SY FERTILIZING AND SEEDING, TYPE A-3
 - 17 SY STRAW MULCHING

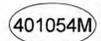
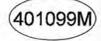
- CONSTRUCT**
- 15 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
 - 3 SY HOT MIX ASPHALT DRIVEWAY, 2" THICK
 - 4 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

- CONSTRUCT**
- 9 SY CONCRETE SIDEWALK, 4" THICK
 - 11 SY TOPSOIL SPREADING, 5" THICK
 - 11 SY FERTILIZING AND SEEDING, TYPE A-3
 - 11 SY STRAW MULCHING

CONSTRUCTION LEGEND

-  CONCRETE SIDEWALK, 4" THICK
-  FULL DEPTH PAVEMENT REPAIR
-  HMA MILLING, 3" OR LESS
-  CONCRETE DRIVEWAY, REINFORCED, 6" THICK
-  RESET BRICK PAVERS

PAVEMENT BOX DETAIL

-  401054M HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
-  401099M HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
-  302036P DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
-  TACK COAT 401030M
-  PRIME COAT 401036M

NOTES:

1. RIGHT OF ENTRY HAS BEEN ACQUIRED BY ESSEX COUNTY FOR SIDEWALK WORK AT THE INTERSECTION
2. FOR DETAILED RAMP DESIGNS, REFER TO GRADING PLANS.
3. ALL DEPRESSED CURB AT CURB RAMPS ARE TO BE CONCRETE VERTICAL CURB FLUSH TO THE ADJACENT PAVEMENT. DEPRESSED CURBS AT DRIVEWAYS ARE TO MATCH MATERIAL OF ADJACENT CURBING, UNLESS OTHERWISE NOTED.
4. PRIOR TO THE ORDERING DRAINAGE MATERIALS, GRATE AND INVERT ELEVATIONS FOR THE PROPOSED DRAINAGE SYSTEM SHALL BE DETERMINED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR REVIEW AFTER TEST PITS HAVE BEEN COMPLETED AND TEST PIT DATA IS OBTAINED. CONTRACTOR SHALL NOT ORDER DRAINAGE MATERIAL UNTIL CONFIRMATION FROM THE ENGINEER IS RECEIVED. FOR THE PURPOSE OF BIDDING, THE CONTRACTOR SHALL ASSUME THE MAXIMUM SYSTEM DEPTH TO BE 6 FEET BELOW EXISTING GRADE.
5. HMA MILLING SHALL BE A MINIMUM OF 2" DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

- CONSTRUCT**
- 57 SY CONCRETE SIDEWALK, 4" THICK
 - 5 SY DETECTABLE WARNING SURFACE
 - 44 LF BELGIAN BLOCK CURB
 - 28 SY TOPSOIL SPREADING, 5" THICK
 - 28 SY FERTILIZING AND SEEDING, TYPE A-3
 - 28 SY STRAW MULCHING

- CONSTRUCT**
- 30 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK

- CONSTRUCT**
- 110 CY EXCAVATION, UNCLASSIFIED
 - 820 LF SAWCUTTING
 - 330 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
 - 80 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
 - 41 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 27 GAL TACK COAT
 - 85 LF PRIME COAT
 - 75 LF 9"X16" CONCRETE VERTICAL CURB
 - 689 LF BELGIAN BLOCK CURB

- CONSTRUCT**
- 5 SY CONCRETE SIDEWALK, 4" THICK
 - 38 SY TOPSOIL SPREADING, 5" THICK
 - 38 SY FERTILIZING AND SEEDING, TYPE A-3
 - 38 SY STRAW MULCHING

- CONSTRUCT**
- 38 LF SAWCUTTING
 - 575 SY HMA MILLING, 3" OR LESS
 - 69 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 47 GAL TACK COAT

DRAINAGE LEGEND

- ① CONSTRUCT INLET, TYPE B. STA 105+46, 19.50' LT
- ② 39 LF 15" RCP
- ③ CONSTRUCT INLET, TYPE B. STA 105+82, 15.00' LT
- ④ CONSTRUCT INLET, TYPE B. STA 105+46, 18.29' RT
- ⑤ 37 LF 15" RCP
- ⑥ CONSTRUCT INLET, TYPE B. STA 105+82, 12.50' RT
- ⑦ 30 LF 15" RCP
- ⑧ 48 LF 15" RCP
- ⑨ CONSTRUCT INLET, TYPE B. STA 106+77, 18.63' RT
- ⑩ 21 LF 15" RCP
- ⑪ CONSTRUCT INLET, TYPE B. STA 105+59, 14.00' RT
- ⑫ 28 LF 15" RCP
- ⑬ CONSTRUCT INLET, TYPE B. STA 106+59, 12.50' LT
- ⑭ 9 LF 15" RCP
- ⑮ CONSTRUCT INLET, TYPE B. STA 107+41, 19.50' LT
- ⑯ 87 LF 15" RCP
- ⑰ MANHOLE, 4' DIAMETER
- ⑱ 6 LF 15" RCP

CURB LEGEND

- BB BELGIAN BLOCK CURB
- CC 9"X16" CONCRETE VERTICAL CURB
- CC GRANITE CURB
- (+XX) STATION OF STARTING POINT OF CURB TYPE

TO BE CONSTRUCTED

ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
25	EXCAVATION, UNCLASSIFIED	CY	110	
29	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	SY	375	
30	HMA MILLING, 3" OR LESS	SY	2,040	
31	TACK COAT	GAL	195	
32	PRIME COAT	GAL	85	
33	HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE	T	285	
34	HOT MIX ASPHALT 25 M 64 BASE COURSE	T	80	
36	15" REINFORCED CONCRETE PIPE	LF	305	
40	INLET, TYPE B	U	11	
41	MANHOLE, 4' DIAMETER	U	5	
43	RESET EXISTING CASTING	U	3	
45	BICYCLE SAFE GRATE	U	11	
46	CURB PIECE	U	11	
47	CLEANING DRAINAGE STRUCTURE	U	11	
49	CONCRETE SIDEWALK, 4" THICK	SY	215	
50	HOT MIX ASPHALT DRIVEWAY, 2" THICK	SY	45	
52	CONCRETE DRIVEWAY, REINFORCED, 6" THICK	SY	175	
53	DETECTABLE WARNING SURFACE	SY	20	
54	RESET BRICK PAVERS	SY	50	
55	9" X 16" CONCRETE VERTICAL CURB	LF	75	
57	BELGIAN BLOCK CURB	LF	870	
70	RESET WATER VALVE BOX	U	9	
134	TOPSOIL SPREADING 5" THICK	SY	260	
135	FERTILIZING AND SEEDING, TYPE A-3	SY	260	
136	STRAW MULCHING	SY	260	



C-8
C-12

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

VALLEY STREET (CR-638) & THIRD STREET TOWNSHIP OF SOUTH ORANGE VILLAGE

CONSTRUCTION PLANS

SANJEEV VARGHESE, P.E. COUNTY ENGINEER N.J. LICENSE NO. 40597
DATE: _____

ANDREW M. MULDOWNNEY, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 35760
DATE: 10/26/23

DWG. NO. 24 SCALE 1"=20' DATE OCT 2023

PROJECT No. 728621-0000770.00

REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
800 LANDEX PLAZA, SUITE 300
PARLISPRAY, NEW JERSEY, 07054
PHONE (973) 946-5600, FAX (973) 984-5421
CERTIFICATION OF AUTHORIZATION # 24GA28283000

ANDREW P. LARSEN, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 48663
DATE: 10/25/2023

TO BE CONSTRUCTED

ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
25	EXCAVATION, UNCLASSIFIED	CY	85	
29	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	SY	255	
30	HMA MILLING, 3" OR LESS	SY	3,350	
31	TACK COAT	GAL	290	
32	PRIME COAT	GAL	65	
33	HOT MIX ASPHALT 12.5M64 SURFACE COURSE	T	425	
34	HOT MIX ASPHALT 25M64 BASE COURSE	T	60	
36	15" REINFORCED CONCRETE PIPE	LF	240	
39	4" HIGH DENSITY POLYETHYLENE PIPE	LF	11	
40	INLET, TYPE B	U	9	
42	INLET CONVERTED TO MANHOLE	U	7	
45	BICYCLE SAFE GRATE	U	9	
46	CURB PIECE	U	9	
47	CLEANING DRAINAGE STRUCTURE	U	13	
48	TRENCH DRAIN	LF	10	
49	CONCRETE SIDEWALK, 4" THICK	SY	265	
50	HOT MIX ASPHALT DRIVEWAY, 2" THICK	SY	10	
52	CONCRETE DRIVEWAY, REINFORCED, 6" THICK	SY	30	
53	DETECTABLE WARNING SURFACE	SY	20	
54	RESET BRICK PAVERS	SY	50	
55	9" X 16" CONCRETE VERTICAL CURB	LF	85	
57	BELGIAN BLOCK CURB	LF	620	
59	BLUESTONE CURB	LF	85	
70	RESET WATER VALVE BOX	U	8	
134	TOPSOIL SPREADING 5" THICK	SY	205	
135	FERTILIZING AND SEEDING, TYPE A-3	SY	205	
136	STRAW MULCHING	SY	205	

- CONSTRUCT**
- 35 LF SAWCUTTING
 - 245 SY HMA MILLING, 3" OR LESS
 - 30 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 20 GAL TACK COAT

- CONSTRUCT**
- 85 CY EXCAVATION, UNCLASSIFIED
 - 585 LF SAWCUTTING
 - 250 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
 - 60 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
 - 30 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 22 GAL TACK COAT
 - 65 GAL PRIME COAT
 - 85 LF 9"X16" CONCRETE VERTICAL CURB
 - 440 LF BELGIAN BLOCK CURB
 - 85 LF BLUESTONE CURB

- CONSTRUCT**
- 50 LF BELGIAN BLOCK CURB
 - 53 SY CONCRETE SIDEWALK, 4" THICK
 - 5 SY DETECTABLE WARNING SURFACE
 - 46 SY TOPSOIL SPREADING, 5" THICK
 - 46 SY FERTILIZING AND SEEDING, A-3
 - 46 SY STRAW MULCHING

- CONSTRUCT**
- 35 LF BELGIAN BLOCK CURB
 - 50 SY RESET BRICK PAVERS
 - 90 SY CONCRETE SIDEWALK, 4" THICK
 - 5 SY DETECTABLE WARNING SURFACE
 - 68 SY TOPSOIL SPREADING, 5" THICK
 - 68 SY FERTILIZING AND SEEDING, A-3
 - 68 SY STRAW MULCHING

- CONSTRUCT**
- 42 LF SAWCUTTING
 - 515 SY HMA MILLING, 3" OR LESS
 - 61 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 40 GAL TACK COAT

- CONSTRUCT**
- 55 LF BELGIAN BLOCK CURB
 - 31 SY CONCRETE SIDEWALK, 4" THICK
 - 5 SY DETECTABLE WARNING SURFACE
 - 39 SY TOPSOIL SPREADING, 5" THICK
 - 39 SY FERTILIZING AND SEEDING, A-3
 - 39 SY STRAW MULCHING

- CONSTRUCT**
- 30 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
 - 10 SY HOT MIX ASPHALT DRIVEWAY, 2" THICK
 - 5 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

- CONSTRUCT**
- 11 SY CONCRETE SIDEWALK, 4" THICK
 - 6 SY TOPSOIL SPREADING, 5" THICK
 - 6 SY FERTILIZING AND SEEDING, A-3
 - 6 SY STRAW MULCHING

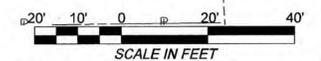
- CONSTRUCT**
- 107 LF SAWCUTTING
 - 2433 SY HMA MILLING, 3" OR LESS
 - 285 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 195 GAL TACK COAT

- CONSTRUCT**
- 40 LF BELGIAN BLOCK CURB
 - 80 SY CONCRETE SIDEWALK, 4" THICK
 - 5 SY DETECTABLE WARNING SURFACE
 - 46 SY TOPSOIL SPREADING, 5" THICK
 - 46 SY FERTILIZING AND SEEDING, A-3
 - 46 SY STRAW MULCHING

- CONSTRUCT**
- 36 LF SAWCUTTING
 - 157 SY HMA MILLING, 3" OR LESS
 - 19 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 13 GAL TACK COAT

- DRAINAGE LEGEND**
- 1 CONSTRUCT INLET, TYPE B. STA 111+86, 19.00' LT
 - 2 46 LF 15" RCP
 - 3 CONVERT INLET TO MANHOLE
 - 4 CONSTRUCT INLET, TYPE B. STA 111+86, 19.00' RT
 - 5 44 LF 15" RCP
 - 6 CONVERT INLET TO MANHOLE
 - 7 CONSTRUCT INLET, TYPE B. STA 112+27, 12.50' RT
 - 8 9 LF 15" RCP
 - 9 CONVERT INLET TO MANHOLE
 - 10 35 LF 15" RCP
 - 11 CONSTRUCT INLET, TYPE B. STA 3004+17, 16.00' RT
 - 12 CONSTRUCT INLET, TYPE B. STA 3004+20, 16.00' LT
 - 13 17 LF 15" RCP
 - 14 CONVERT INLET TO MANHOLE
 - 15 CONSTRUCT INLET, TYPE B. STA 113+41, 25.00' RT
 - 16 31 LF 15" RCP
 - 17 CONVERT INLET TO MANHOLE
 - 18 CONSTRUCT INLET, TYPE B. STA 113+20, 20.37' LT
 - 19 46 LF 15" RCP
 - 20 CONSTRUCT INLET, TYPE B. STA 112+82, 10.74' LT
 - 21 12 LF 15" RCP
 - 22 CONVERT INLET TO MANHOLE
 - 23 11 LF 4" HDPE
 - 24 CONSTRUCT 8 LF TRENCH DRAIN

- CURB LEGEND**
- BB BELGIAN BLOCK CURB
 - CC 9"X16" CONCRETE VERTICAL CURB
 - GC GRANITE CURB
 - BS BLUESTONE CURB
 - (+XX) STATION OF STARTING POINT OF CURB TYPE



- CONSTRUCTION LEGEND**
- [Pattern] CONCRETE SIDEWALK, 4" THICK
 - [Pattern] FULL DEPTH PAVEMENT REPAIR
 - [Pattern] HMA MILLING, 3" OR LESS
 - [Pattern] CONCRETE DRIVEWAY, REINFORCED, 6" THICK
 - [Pattern] RESET BRICK PAVERS

- PAVEMENT BOX DETAIL**
- 401054M HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 401099M HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
 - 302036P DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
 - TACK COAT 401030M
 - PRIME COAT 401036M

- NOTES:**
- RIGHT OF ENTRY HAS BEEN ACQUIRED BY ESSEX COUNTY FOR SIDEWALK WORK AT THE INTERSECTION
 - FOR DETAILED RAMP DESIGNS, REFER TO GRADING PLANS.
 - ALL DEPRESSED CURB AT CURB RAMPS ARE TO BE CONCRETE VERTICAL CURB FLUSH TO THE ADJACENT PAVEMENT. DEPRESSED CURBS AT DRIVEWAYS ARE TO MATCH MATERIAL OF ADJACENT CURBING, UNLESS OTHERWISE NOTED.
 - PRIOR TO THE ORDERING DRAINAGE MATERIALS, GRATE AND INVERT ELEVATIONS FOR THE PROPOSED DRAINAGE SYSTEM SHALL BE DETERMINED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR REVIEW AFTER TEST PITS HAVE BEEN COMPLETED AND TEST PIT DATA IS OBTAINED. CONTRACTOR SHALL NOT ORDER DRAINAGE MATERIAL UNTIL CONFIRMATION FROM THE ENGINEER IS RECEIVED. FOR THE PURPOSE OF BIDDING, THE CONTRACTOR SHALL ASSUME THE MAXIMUM SYSTEM DEPTH TO BE 6 FEET BELOW EXISTING GRADE.
 - HMA MILLING SHALL BE A MINIMUM OF 2" DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

REV.	DESCRIPTION	DATE	BY	CHK.

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

VALLEY STREET (CR-638) & FIRST STREET TOWNSHIP OF SOUTH ORANGE VILLAGE

CONSTRUCTION PLANS

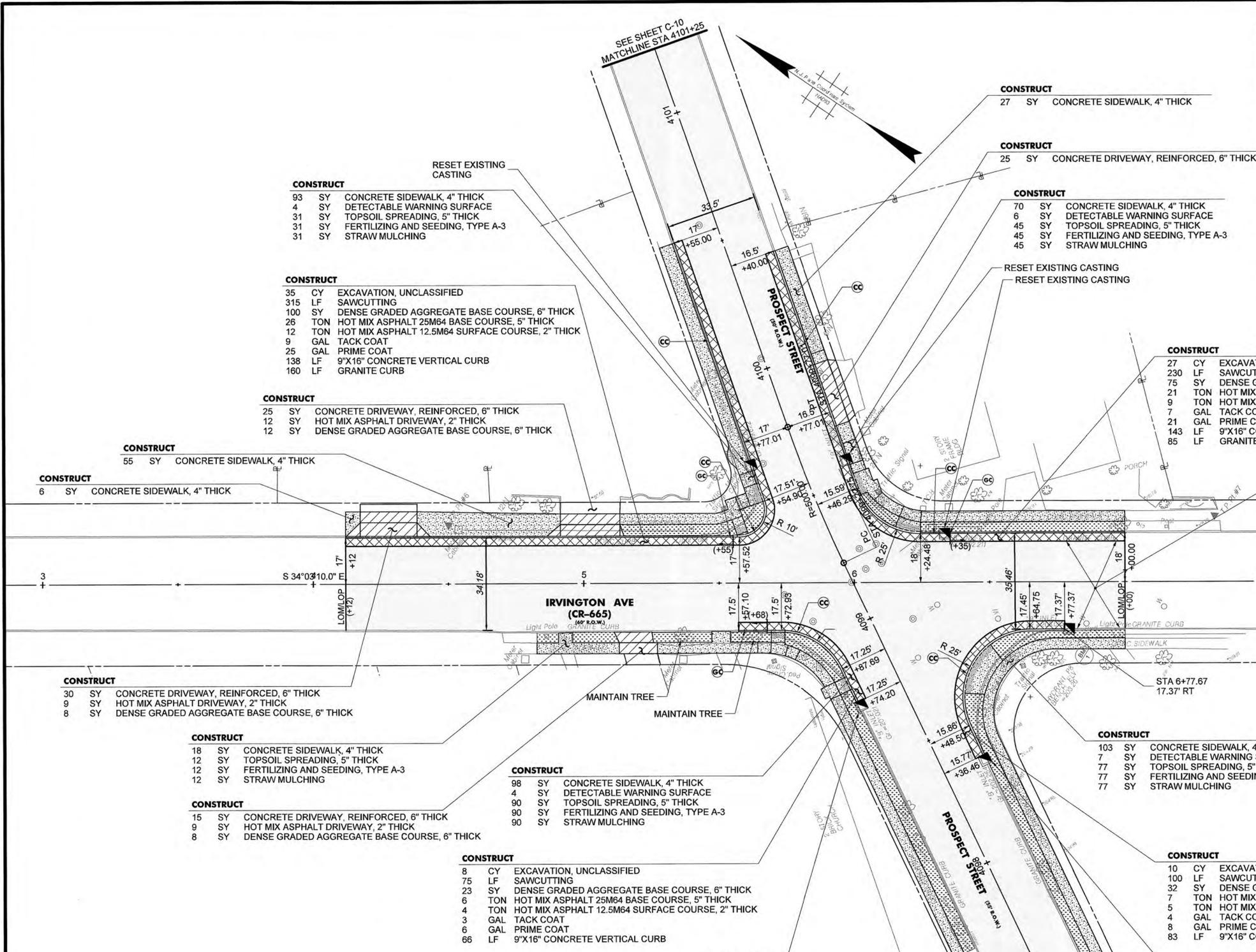
SANJEEV VARGHESE, P.E. COUNTY ENGINEER N.J. LICENSE NO. 40697
DATE: _____

ANDREW M. MULDOWNY, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 35760
DATE: 10/26/23

ANDREW P. LARSEN, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 48863
DATE: 10/25/2023

DWG. NO. 25 SCALE 1"=20' DATE OCT 2023 PROJECT No. 728621-0000770.00

TO BE CONSTRUCTED				
ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
25	EXCAVATION, UNCLASSIFIED	CY	80	
29	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	SY	255	
30	HMA MILLING, 3" OR LESS	SY	4,835	
31	TACK COAT	GAL	410	
32	PRIME COAT	GAL	60	
33	HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE	T	600	
34	HOT MIX ASPHALT 25 M 64 BASE COURSE	T	60	
43	RESET EXISTING CASTING	U	6	
45	BICYCLE SAFE GRATE	U	6	
46	CURB PIECE	U	6	
47	CLEANING DRAINAGE STRUCTURE	U	10	
49	CONCRETE SIDEWALK, 4" THICK	SY	470	
50	HOT MIX ASPHALT DRIVEWAY, 2" THICK	SY	30	
52	CONCRETE DRIVEWAY, REINFORCED, 6" THICK	SY	95	
53	DETECTABLE WARNING SURFACE	SY	20	
55	9" X 16" CONCRETE VERTICAL CURB	LF	430	
56	GRANITE CURB	LF	245	
70	RESET WATER VALVE BOX	U	6	
71	RESET GAS VALVE BOX	U	3	
134	TOPSOIL SPREADING 5" THICK	SY	255	
135	FERTILIZING AND SEEDING, TYPE A-3	SY	255	
136	STRAW MULCHING	SY	255	



- CONSTRUCT**
- 55 SY CONCRETE SIDEWALK, 4" THICK
 - 6 SY CONCRETE SIDEWALK, 4" THICK

- CONSTRUCT**
- 35 CY EXCAVATION, UNCLASSIFIED
 - 315 LF SAWCUTTING
 - 100 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
 - 26 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
 - 12 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 9 GAL TACK COAT
 - 25 GAL PRIME COAT
 - 138 LF 9"X16" CONCRETE VERTICAL CURB
 - 160 LF GRANITE CURB

- CONSTRUCT**
- 25 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
 - 12 SY HOT MIX ASPHALT DRIVEWAY, 2" THICK
 - 12 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

- CONSTRUCT**
- 18 SY CONCRETE SIDEWALK, 4" THICK
 - 12 SY TOPSOIL SPREADING, 5" THICK
 - 12 SY FERTILIZING AND SEEDING, TYPE A-3
 - 12 SY STRAW MULCHING

- CONSTRUCT**
- 15 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
 - 9 SY HOT MIX ASPHALT DRIVEWAY, 2" THICK
 - 8 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

- CONSTRUCT**
- 98 SY CONCRETE SIDEWALK, 4" THICK
 - 4 SY DETECTABLE WARNING SURFACE
 - 90 SY TOPSOIL SPREADING, 5" THICK
 - 90 SY FERTILIZING AND SEEDING, TYPE A-3
 - 90 SY STRAW MULCHING

- CONSTRUCT**
- 8 CY EXCAVATION, UNCLASSIFIED
 - 75 LF SAWCUTTING
 - 23 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
 - 6 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
 - 4 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 3 GAL TACK COAT
 - 6 GAL PRIME COAT
 - 66 LF 9"X16" CONCRETE VERTICAL CURB

- CONSTRUCT**
- 27 SY CONCRETE SIDEWALK, 4" THICK

- CONSTRUCT**
- 25 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK

- CONSTRUCT**
- 70 SY CONCRETE SIDEWALK, 4" THICK
 - 6 SY DETECTABLE WARNING SURFACE
 - 45 SY TOPSOIL SPREADING, 5" THICK
 - 45 SY FERTILIZING AND SEEDING, TYPE A-3
 - 45 SY STRAW MULCHING

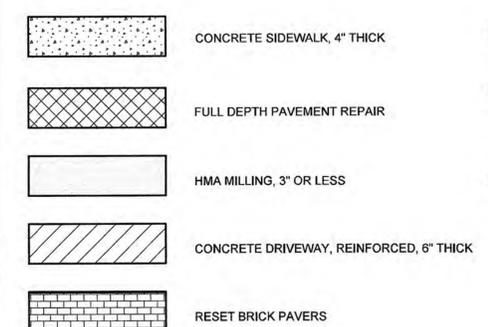
- CONSTRUCT**
- 27 CY EXCAVATION, UNCLASSIFIED
 - 230 LF SAWCUTTING
 - 75 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
 - 21 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
 - 9 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 7 GAL TACK COAT
 - 21 GAL PRIME COAT
 - 143 LF 9"X16" CONCRETE VERTICAL CURB
 - 85 LF GRANITE CURB

- CONSTRUCT**
- 150 LF SAWCUTTING
 - 4835 SY HMA MILLING, 3" OR LESS
 - 570 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 387 GAL TACK COAT

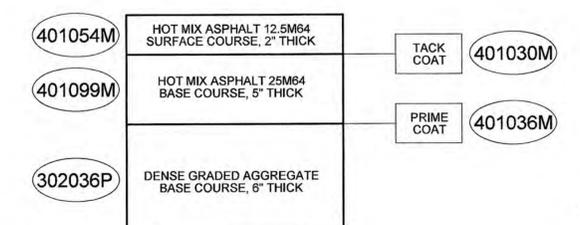
- CONSTRUCT**
- 103 SY CONCRETE SIDEWALK, 4" THICK
 - 7 SY DETECTABLE WARNING SURFACE
 - 77 SY TOPSOIL SPREADING, 5" THICK
 - 77 SY FERTILIZING AND SEEDING, TYPE A-3
 - 77 SY STRAW MULCHING

- CONSTRUCT**
- 10 CY EXCAVATION, UNCLASSIFIED
 - 100 LF SAWCUTTING
 - 32 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
 - 7 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
 - 5 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
 - 4 GAL TACK COAT
 - 8 GAL PRIME COAT
 - 83 LF 9"X16" CONCRETE VERTICAL CURB

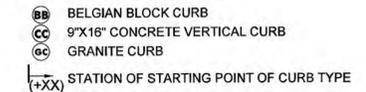
CONSTRUCTION LEGEND



PAVEMENT BOX DETAIL



CURB LEGEND



- NOTES:**
- HMA MILLING SHALL BE A MINIMUM OF 2" DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - FOR DETAILED RAMP DESIGNS, REFER TO GRADING PLANS.
 - ALL DEPRESSED CURB AT CURB RAMPS SHALL BE CONCRETE VERTICAL CURB FLUSH TO THE ADJACENT PAVEMENT. DEPRESSED CURBS AT DRIVEWAYS ARE TO MATCH MATERIAL OF ADJACENT CURBING, UNLESS OTHERWISE NOTED.



REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
 BRIGHT VIEW ENGINEERING, LLC
 70 SOUTH ORANGE AVENUE, SUITE 109
 LIVINGSTON, NEW JERSEY, 07039
 PHONE (973) 228-0999
 CERTIFICATION OF AUTHORIZATION # 24GA28283000

ANDREW P. LARSEN, P.E.
 PROFESSIONAL ENGINEER
 N.J. LICENSE NO. 48663
 DATE: 10/25/2023

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
 DIVISION OF ENGINEERING
 900 BLOOMFIELD AVENUE, VERONA, NJ 07044
 PHONE: (973) 226-8500 FAX: (973) 226-7469

**IRVINGTON AVE (CR-665) & PROSPECT STREET
 TOWNSHIP OF SOUTH ORANGE VILLAGE**

CONSTRUCTION PLANS

SANJEEV VARGHESE, P.E.
 COUNTY ENGINEER
 N.J. LICENSE NO. 40597
 DATE: _____

ANDREW M. MULDOWNY, P.E.
 PROFESSIONAL ENGINEER
 N.J. LICENSE NO. 35760
 DATE: 10/26/23

DWG. NO.	SCALE	DATE	PROJECT NO.
26	1"=20'	OCT 2023	728621-000770.00

INVS, INC., PARSIPPANY, N.J. 07054
 FILE: 228402-CR-665

CONSTRUCTION LEGEND

-  CONCRETE SIDEWALK, 4" THICK
-  FULL DEPTH PAVEMENT REPAIR
-  HMA MILLING, 3" OR LESS
-  CONCRETE DRIVEWAY, REINFORCED, 6" THICK
-  RESET BRICK PAVERS

PAVEMENT BOX DETAIL

- 401054M HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 401099M HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
- 302036P DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
- TACK COAT 401030M
- PRIME COAT 401036M

NOTES:

1. HMA MILLING SHALL BE A MINIMUM OF 2" DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. FOR DETAILED RAMP DESIGNS, REFER TO GRADING PLANS.
3. ALL DEPRESSED CURB AT CURB RAMPS SHALL BE CONCRETE VERTICAL CURB FLUSH TO THE ADJACENT PAVEMENT. DEPRESSED CURBS AT DRIVEWAYS ARE TO MATCH MATERIAL OF ADJACENT CURBING, UNLESS OTHERWISE NOTED.

CONSTRUCT

- 5 SY CONCRETE SIDEWALK, 4" THICK
- 6 SY TOPSOIL SPREADING, 5" THICK
- 6 SY FERTILIZING AND SEEDING, TYPE A-3
- 6 SY STRAW MULCHING

CONSTRUCT

- 15 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- 9 SY HOT MIX ASPHALT DRIVEWAY, 4" THICK
- 8 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

CONSTRUCT

- 90 SY CONCRETE SIDEWALK, 4" THICK

CONSTRUCT

- 17 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- 9 SY HOT MIX ASPHALT DRIVEWAY, 4" THICK
- 8 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

CONSTRUCT

- 30 SY CONCRETE SIDEWALK, 4" THICK

CONSTRUCT

- 20 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- 12 SY HOT MIX ASPHALT DRIVEWAY, 4" THICK
- 11 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

CONSTRUCT

- 65 SY CONCRETE SIDEWALK, 4" THICK
- 39 SY RESET BRICK PAVERS
- 3 SY DETECTABLE WARNING SURFACE
- 9 LF 9"X16" CONCRETE VERTICAL CURB
- 135 LF BELGIAN BLOCK CURB
- 8 SY TOPSOIL SPREADING, 5" THICK
- 8 SY FERTILIZING AND SEEDING, TYPE A-3
- 8 SY STRAW MULCHING

CURB LEGEND

- BB BELGIAN BLOCK CURB
- CC 9"X16" CONCRETE VERTICAL CURB
- GC GRANITE CURB
- (+XX) STATION OF STARTING POINT OF CURB TYPE

CONSTRUCT

- 21 SY CONCRETE SIDEWALK, 4" THICK
- 23 SY RESET BRICK PAVERS
- 3 SY DETECTABLE WARNING SURFACE
- 9 LF 9"X16" CONCRETE VERTICAL CURB
- 18 LF BELGIAN BLOCK CURB
- 5 SY TOPSOIL SPREADING, 5" THICK
- 5 SY FERTILIZING AND SEEDING, TYPE A-3
- 5 SY STRAW MULCHING

CONSTRUCT

- 55 LF SAWCUTTING
- 615 SY HMA MILLING, 3" OR LESS
- 72 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 50 GAL TACK COAT

CONSTRUCT

- 114 SY CONCRETE SIDEWALK, 4" THICK
- 58 SY RESET BRICK PAVERS
- 5 SY DETECTABLE WARNING SURFACE

CONSTRUCT

- 70 CY EXCAVATION, UNCLASSIFIED
- 550 LF SAWCUTTING
- 205 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
- 48 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
- 24 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 17 GAL TACK COAT
- 50 GAL PRIME COAT
- 67 LF 9"X16" CONCRETE VERTICAL CURB
- 122 LF BELGIAN BLOCK CURB

CONSTRUCT

- 165 SY CONCRETE SIDEWALK, 4" THICK
- 4 SY DETECTABLE WARNING SURFACE
- 20 SY TOPSOIL SPREADING, 5" THICK
- 20 SY FERTILIZING AND SEEDING, TYPE A-3
- 20 SY STRAW MULCHING

CONSTRUCT

- 25 CY EXCAVATION, UNCLASSIFIED
- 220 LF SAWCUTTING
- 68 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
- 17 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
- 9 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 6 GAL TACK COAT
- 20 GAL PRIME COAT
- 95 LF 9"X16" CONCRETE VERTICAL CURB
- 60 LF BELGIAN BLOCK CURB

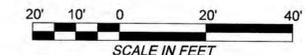
CONSTRUCT

- 4835 SY HMA MILLING, 3" OR LESS
- 570 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 388 GAL TACK COAT

TO BE CONSTRUCTED

ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
25	EXCAVATION, UNCLASSIFIED	CY	95	
29	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	SY	300	
30	HMA MILLING, 3" OR LESS	SY	5,450	
31	TACK COAT	GAL	460	
32	PRIME COAT	GAL	70	
33	HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE	T	675	
34	HOT MIX ASPHALT 25 M 64 BASE COURSE	T	65	
43	RESET EXISTING CASTING	U	2	
44	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING	U	5	
47	CLEANING DRAINAGE STRUCTURE	U	4	
49	CONCRETE SIDEWALK, 4" THICK	SY	490	
50	HOT MIX ASPHALT DRIVEWAY, 2" THICK	SY	30	
52	CONCRETE DRIVEWAY, REINFORCED, 6" THICK	SY	90	
53	DETECTABLE WARNING SURFACE	SY	15	
54	RESET BRICK PAVERS	SY	120	
55	9" X 16" CONCRETE VERTICAL CURB	LF	180	
57	BELGIAN BLOCK CURB	LF	335	
70	RESET WATER VALVE BOX	U	5	
71	RESET GAS VALVE BOX	U	6	
134	TOPSOIL SPREADING 5" THICK	SY	40	
135	FERTILIZING AND SEEDING, TYPE A-3	SY	40	
136	STRAW MULCHING	SY	40	

NVE, INC. PARLISPPANY, NJ, 07054
TEL: 973-226-6491



C-11
C-12

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

**S. ORANGE AVE (CR-510) & PROSPECT ST
TOWNSHIP OF SOUTH ORANAGE VILLAGE**

CONSTRUCTION PLANS

SANJEEV VARGHESE, P.E.
COUNTY ENGINEER
N.J. LICENSE NO. 40597
DATE: _____

ANDREW M. MULDOWNY, P.E.
PROFESSIONAL ENGINEER
N.J. LICENSE NO. 35760
DATE: 10/26/23

DWG. NO. 27 SCALE 1"=20' DATE OCT 2023

FILE No. PROJECT No. 728621-0000770.00

REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
Moving you forward

ANDREW P. LARSEN, P.E.
PROFESSIONAL ENGINEER
N.J. LICENSE NO. 48663
DATE: 10/25/2023

BRIGHT VIEW ENGINEERING, LLC.
70 SOUTH ORANGE AVENUE, SUITE 109
LIVINGSTON, NEW JERSEY, 07039
PHONE (973) 226-0999
CERTIFICATION OF AUTHORIZATION # 24GA28283000

PAVEMENT BOX DETAIL

401054M	HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK	TACK COAT	401030M
401099M	HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK	PRIME COAT	401036M
302036P	DENSE GRADED AGGREGATE BASE COURSE, 6" THICK		

NOTES:

- RIGHT OF ENTRY HAS BEEN ACQUIRED BY ESSEX COUNTY FOR SIDEWALK WORK AT THE INTERSECTION
- FOR DETAILED RAMP DESIGNS, REFER TO GRADING PLANS.
- ALL DEPRESSED CURB AT CURB RAMPS ARE TO BE CONCRETE VERTICAL CURB FLUSH TO THE ADJACENT PAVEMENT. DEPRESSED CURBS AT DRIVEWAYS ARE TO MATCH MATERIAL OF ADJACENT CURBING, UNLESS OTHERWISE NOTED.
- HMA MILLING SHALL BE A MINIMUM OF 2" DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

CONSTRUCTION LEGEND

	CONCRETE SIDEWALK, 4" THICK
	FULL DEPTH PAVEMENT REPAIR
	HMA MILLING, 3" OR LESS
	CONCRETE DRIVEWAY, REINFORCED, 6" THICK
	RESET BRICK PAVERS

CONSTRUCT

- 220 SF LANDSCAPE WALL
- 22 CY EXCAVATION, UNCLASSIFIED
- 200 LF SAWCUTTING
- 63 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
- 15 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
- 8 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 5 GAL TACK COAT
- 15 GAL PRIME COAT
- 11 LF 9"X16" CONCRETE VERTICAL CURB
- 55 LF RESET GRANITE CURB
- 132 LF BELGIAN BLOCK CURB
- 6 SY CONCRETE SIDEWALK, 4" THICK
- 8 SY TOPSOILING, 5" THICK
- 8 SY FERTILIZING AND SEEDING, TYPE A-3
- 8 SY STRAW MULCHING
- 16 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- 5 SY HOT MIX ASPHALT DRIVEWAY, 2" THICK
- 4 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

CONSTRUCT

- 60 LF BELGIAN BLOCK CURB
- 90 SY CONCRETE SIDEWALK, 4" THICK
- 4 SY DETECTABLE WARNING SURFACE
- 90 SY TOPSOILING, 5" THICK
- 90 SY FERTILIZING AND SEEDING, TYPE A-3
- 90 SY STRAW MULCHING

CONSTRUCT

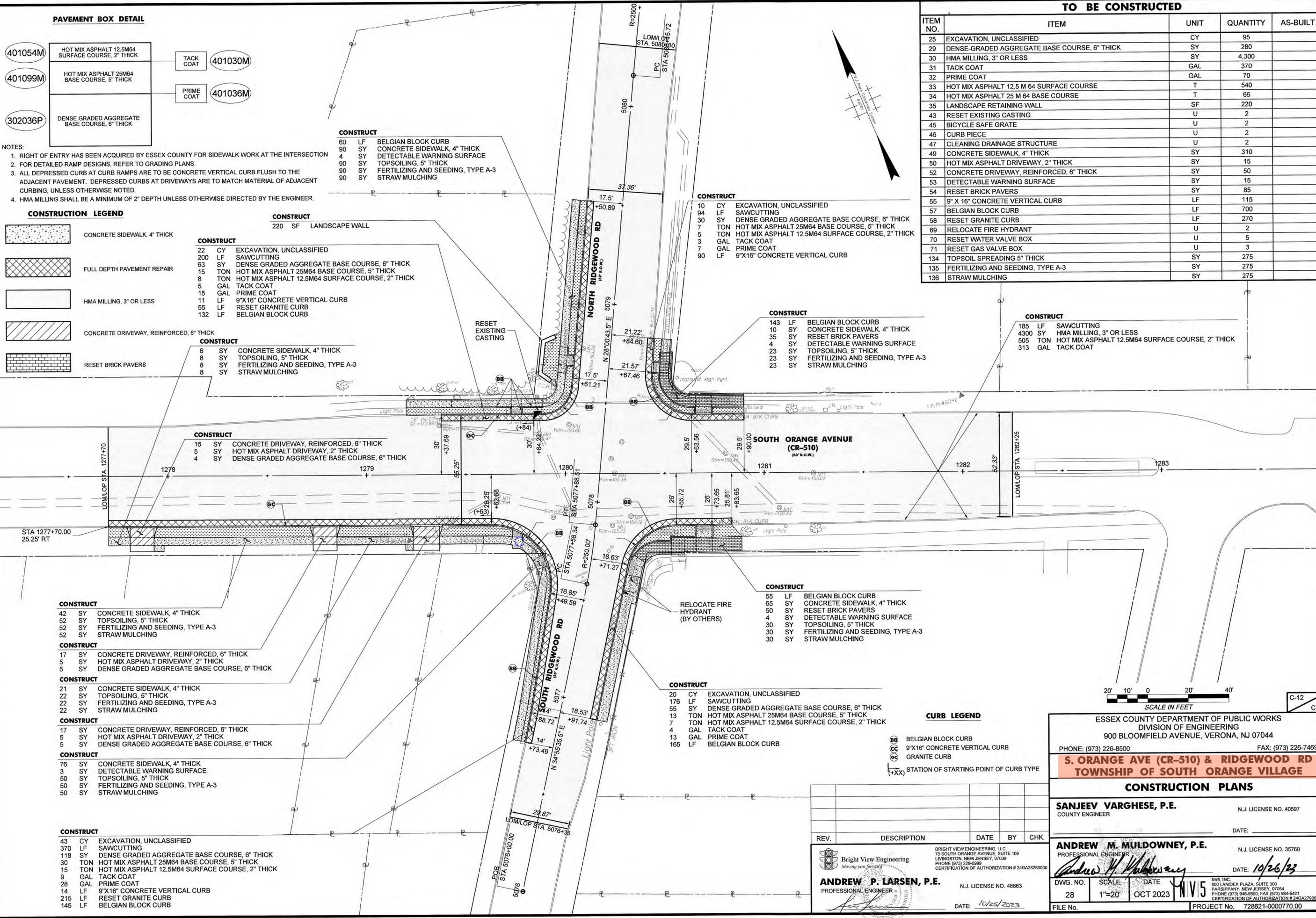
- 10 CY EXCAVATION, UNCLASSIFIED
- 94 LF SAWCUTTING
- 30 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
- 7 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
- 5 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 3 GAL TACK COAT
- 7 GAL PRIME COAT
- 90 LF 9"X16" CONCRETE VERTICAL CURB

CONSTRUCT

- 143 LF BELGIAN BLOCK CURB
- 10 SY CONCRETE SIDEWALK, 4" THICK
- 35 SY RESET BRICK PAVERS
- 4 SY DETECTABLE WARNING SURFACE
- 23 SY TOPSOILING, 5" THICK
- 23 SY FERTILIZING AND SEEDING, TYPE A-3
- 23 SY STRAW MULCHING

CONSTRUCT

- 185 LF SAWCUTTING
- 4300 SY HMA MILLING, 3" OR LESS
- 505 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 313 GAL TACK COAT



CURB LEGEND

- BB BELGIAN BLOCK CURB
- CC 9"X16" CONCRETE VERTICAL CURB
- CC GRANITE CURB
- (+XX) STATION OF STARTING POINT OF CURB TYPE



C-12
C-12

TO BE CONSTRUCTED				
ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
25	EXCAVATION, UNCLASSIFIED	CY	95	
29	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	SY	280	
30	HMA MILLING, 3" OR LESS	SY	4,300	
31	TACK COAT	GAL	370	
32	PRIME COAT	GAL	70	
33	HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE	T	540	
34	HOT MIX ASPHALT 25 M 64 BASE COURSE	T	65	
35	LANDSCAPE RETAINING WALL	SF	220	
43	RESET EXISTING CASTING	U	2	
45	BICYCLE SAFE GRATE	U	2	
46	CURB PIECE	U	2	
47	CLEANING DRAINAGE STRUCTURE	U	2	
49	CONCRETE SIDEWALK, 4" THICK	SY	310	
50	HOT MIX ASPHALT DRIVEWAY, 2" THICK	SY	15	
52	CONCRETE DRIVEWAY, REINFORCED, 6" THICK	SY	50	
53	DETECTABLE WARNING SURFACE	SY	15	
54	RESET BRICK PAVERS	SY	85	
55	9" X 16" CONCRETE VERTICAL CURB	LF	115	
57	BELGIAN BLOCK CURB	LF	700	
58	RESET GRANITE CURB	LF	270	
69	RELOCATE FIRE HYDRANT	U	2	
70	RESET WATER VALVE BOX	U	5	
71	RESET GAS VALVE BOX	U	3	
134	TOPSOIL SPREADING 5" THICK	SY	275	
135	FERTILIZING AND SEEDING, TYPE A-3	SY	275	
136	STRAW MULCHING	SY	275	

CONSTRUCT

- 42 SY CONCRETE SIDEWALK, 4" THICK
- 52 SY TOPSOILING, 5" THICK
- 52 SY FERTILIZING AND SEEDING, TYPE A-3
- 52 SY STRAW MULCHING

CONSTRUCT

- 17 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- 5 SY HOT MIX ASPHALT DRIVEWAY, 2" THICK
- 5 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

CONSTRUCT

- 21 SY CONCRETE SIDEWALK, 4" THICK
- 22 SY TOPSOILING, 5" THICK
- 22 SY FERTILIZING AND SEEDING, TYPE A-3
- 22 SY STRAW MULCHING

CONSTRUCT

- 17 SY CONCRETE DRIVEWAY, REINFORCED, 6" THICK
- 5 SY HOT MIX ASPHALT DRIVEWAY, 2" THICK
- 5 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK

CONSTRUCT

- 76 SY CONCRETE SIDEWALK, 4" THICK
- 3 SY DETECTABLE WARNING SURFACE
- 50 SY TOPSOILING, 5" THICK
- 50 SY FERTILIZING AND SEEDING, TYPE A-3
- 50 SY STRAW MULCHING

CONSTRUCT

- 43 CY EXCAVATION, UNCLASSIFIED
- 370 LF SAWCUTTING
- 118 SY DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
- 30 TON HOT MIX ASPHALT 25M64 BASE COURSE, 5" THICK
- 15 TON HOT MIX ASPHALT 12.5M64 SURFACE COURSE, 2" THICK
- 9 GAL TACK COAT
- 28 GAL PRIME COAT
- 14 LF 9"X16" CONCRETE VERTICAL CURB
- 215 LF RESET GRANITE CURB
- 145 LF BELGIAN BLOCK CURB

REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
 BRIGHT VIEW ENGINEERING, LLC.
 70 SOUTH ORANGE AVENUE, SUITE 100
 LIVINGSTON, NEW JERSEY, 07039
 PHONE (973) 226-8500
 CERTIFICATION OF AUTHORIZATION # 24GA28293000

ANDREW P. LARSEN, P.E.
 PROFESSIONAL ENGINEER
 N.J. LICENSE NO. 48663
 DATE: 10/25/2023

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
 DIVISION OF ENGINEERING
 900 BLOOMFIELD AVENUE, VERONA, NJ 07044
 PHONE: (973) 226-8500 FAX: (973) 226-7469

S. ORANGE AVE (CR-510) & RIDGEWOOD RD
TOWNSHIP OF SOUTH ORANGE VILLAGE

CONSTRUCTION PLANS

SANJEEV VARGHESE, P.E.
 COUNTY ENGINEER
 N.J. LICENSE NO. 40597

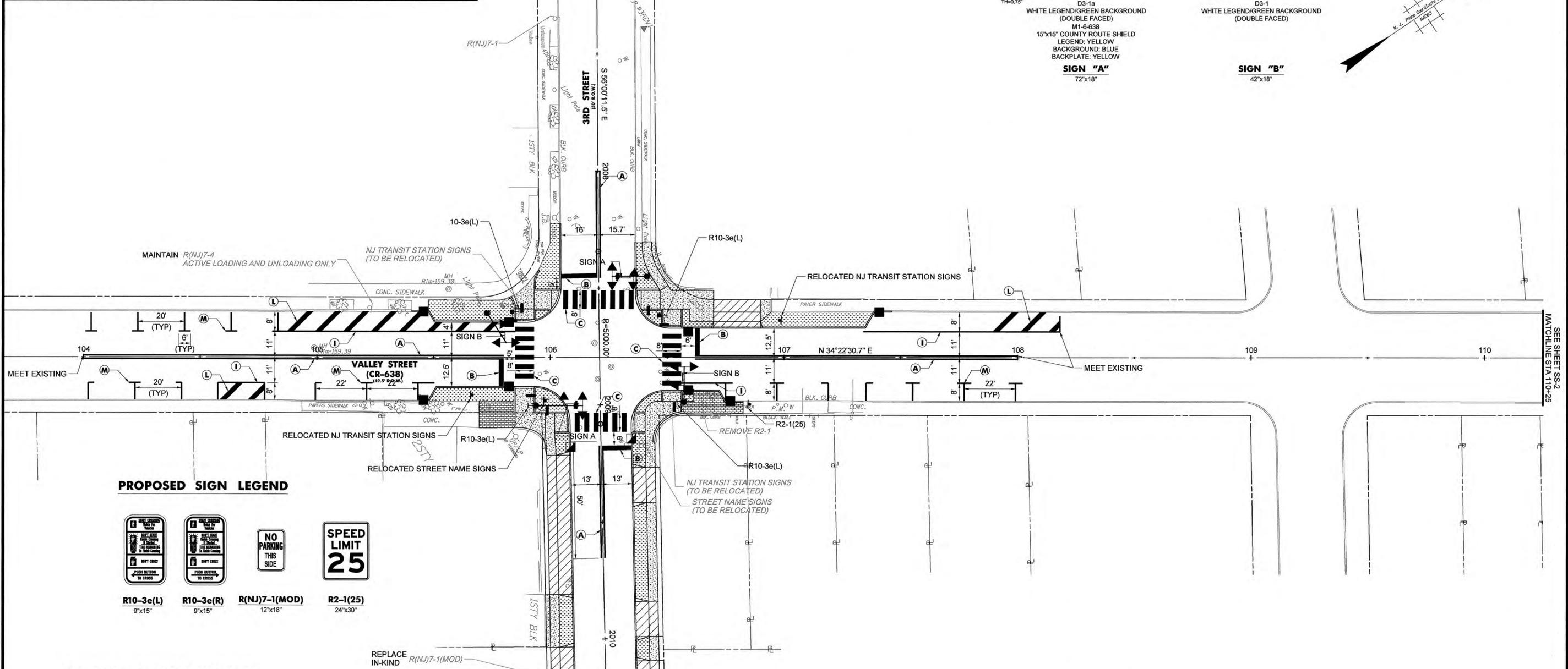
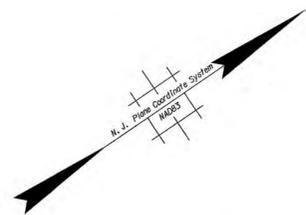
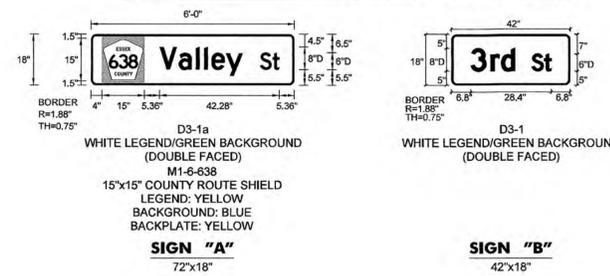
ANDREW M. MULDOWNY, P.E.
 PROFESSIONAL ENGINEER
 N.J. LICENSE NO. 35760
 DATE: 10/26/23

DWG. NO. 28 SCALE 1"=20' DATE OCT 2023

FILE No. PROJECT No. 728621-0000770.00

TO BE CONSTRUCTED				
ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
60	TRAFFIC STRIPES, 4"	LF	1,445	
63	TRAFFIC MARKING LINES, 24"	LF	230	
66	TRAFFIC PAINT, CURB	LF	440	
67	REGULATORY AND WARNING SIGN	SF	10	
68	OVERHEAD STREET NAME SIGNS	SF	35	

PROPOSED MAST ARM SIGN LEGEND

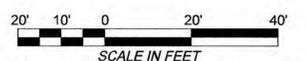


PROPOSED SIGN LEGEND



PAVEMENT MARKINGS LEGEND

- IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:
- (A) CENTER LINES 2 - 4" WIDE YELLOW LINES
 - (B) STOP LINES 24" WIDE WHITE LINE
 - (C) CROSSWALK LINES 24" WIDE WHITE LINE, 2' GAP
 - (D) CHANNELIZED LINES 8" WIDE WHITE LINE
 - (E) SOLID WHITE LINES 4" WIDE WHITE LINE
 - (F) BROKEN LINES, WHITE 4" WIDE WHITE LINE (10' LONG, 30' GAP)
 - (G) DOTTED WHITE LINE 8" WIDE WHITE LINE (3' LONG, 9' GAP)
 - (H) LANE LINE EXTENSION THROUGH INTERSECTION 4" WIDE WHITE LINE (2' LONG, 4' GAP)
 - (I) RIGHT EDGE LINE 4" WIDE WHITE LINE
 - (J) LEFT EDGE LINE 4" WIDE YELLOW LINE
 - (K) MEDIAN GORE HATCHING 24" WIDE YELLOW LINE (@135° & 12' O.C.)
 - (L) EDGE GORE HATCHING 24" WIDE WHITE LINE (@45° & 12' O.C.)
 - (M) PARKING STALL LINES 4" WIDE WHITE LINE



ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

VALLEY STREET (CR-638) & THIRD STREET TOWNSHIP OF SOUTH ORANGE VILLAGE
SIGNING & STRIPING PLAN

SANJEEV VARGHESE, P.E. N.J. LICENSE NO. 40597
COUNTY ENGINEER

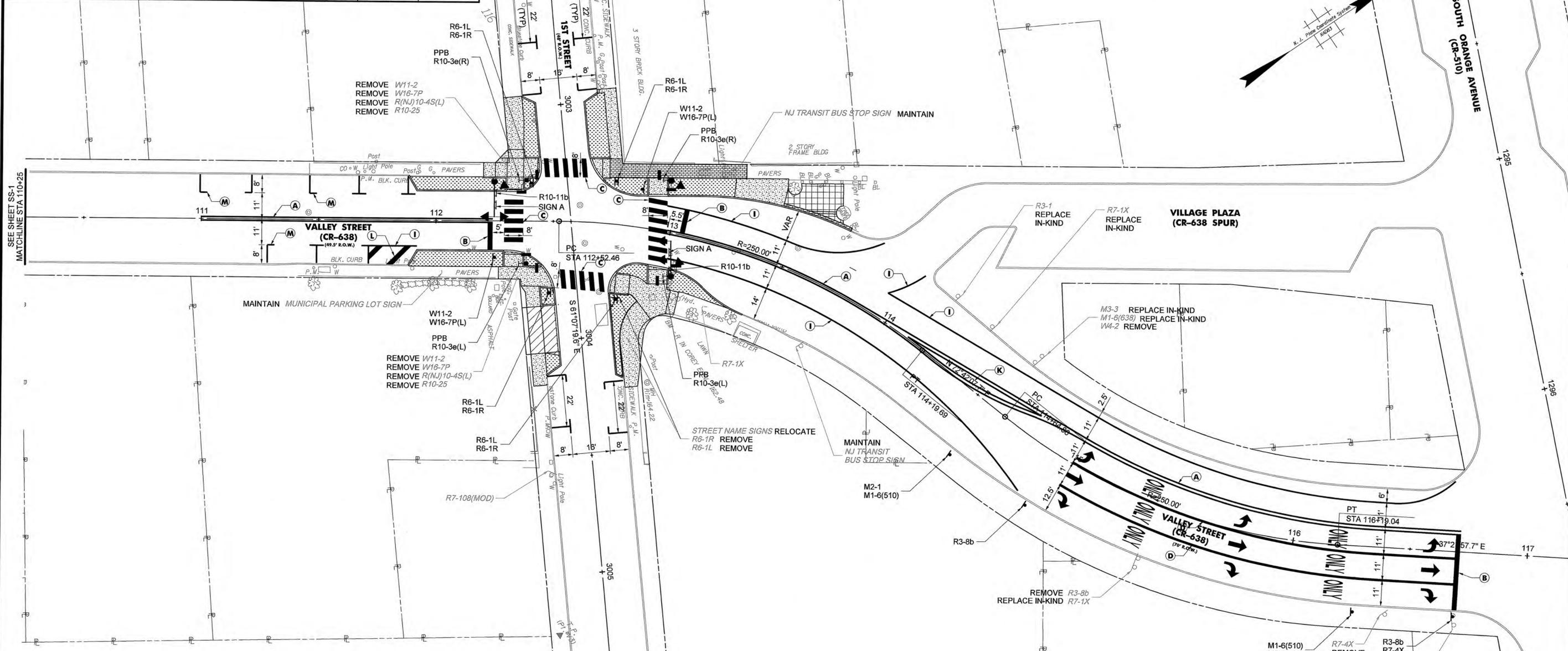
ANDREW M. MULDOWNEY, P.E. N.J. LICENSE NO. 35760
PROFESSIONAL ENGINEER
DATE: 10/26/23

REV.	DESCRIPTION	DATE	BY	CHK.

ANDREW P. LARSEN, P.E. N.J. LICENSE NO. 48663
PROFESSIONAL ENGINEER
DATE: 10/25/2023

DWG. NO. 48 SCALE 1"=20' DATE OCT 2023 PROJECT No. 728621-0000770.00

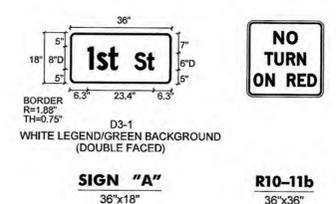
TO BE CONSTRUCTED				
ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
60	TRAFFIC STRIPES, 4"	LF	2,120	
61	TRAFFIC STRIPES, 8"	LF	385	
62	TRAFFIC MARKINGS	SF	285	
63	TRAFFIC MARKING LINES, 24"	LF	285	
66	TRAFFIC PAINT, CURB	LF	440	
67	REGULATORY AND WARNING SIGN	SF	120	
68	OVERHEAD STREET NAME SIGNS	SF	10	



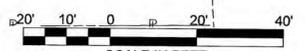
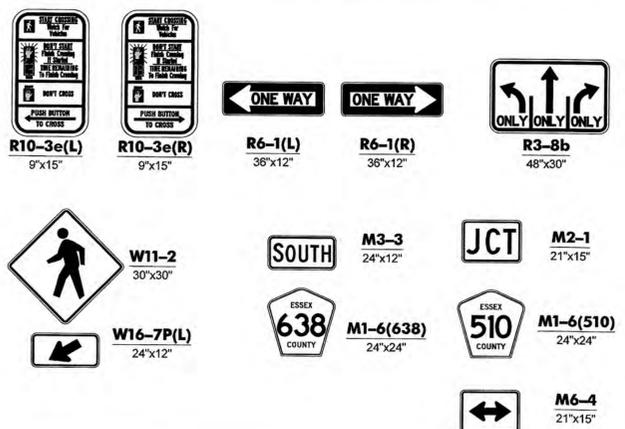
PAVEMENT MARKINGS LEGEND

- IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:
- (A) CENTER LINES
 - (B) STOP LINES
 - (C) CROSSWALK LINES
 - (D) CHANNELIZED LINES
 - (E) SOLID WHITE LINES
 - (F) BROKEN LINES, WHITE
 - (G) DOTTED WHITE LINE
 - (H) LANE LINE EXTENSION THROUGH INTERSECTION
 - (I) RIGHT EDGE LINE
 - (J) LEFT EDGE LINE
 - (K) MEDIAN GORE HATCHING
 - (L) EDGE GORE HATCHING
 - (M) PARKING STALL LINES
- 2 - 4" WIDE YELLOW LINES
 - 24" WIDE WHITE LINE
 - 24" WIDE WHITE LINE, 2' GAP
 - 8" WIDE WHITE LINE
 - 4" WIDE WHITE LINE
 - 4" WIDE WHITE LINE (10' LONG, 30' GAP)
 - 8" WIDE WHITE LINE (3' LONG, 9' GAP)
 - 4" WIDE WHITE LINE (2' LONG, 4' GAP)
 - 4" WIDE WHITE LINE
 - 4" WIDE YELLOW LINE
 - 24" WIDE YELLOW LINE (@135° & 12' O.C.)
 - 24" WIDE WHITE LINE (@45° & 12' O.C.)
 - 4" WIDE WHITE LINE

PROPOSED MAST ARM SIGN LEGEND



PROPOSED SIGN LEGEND



ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

**VALLEY STREET (CR-638) & FIRST STREET
TOWNSHIP OF SOUTH ORANGE VILLAGE**

SIGNING & STRIPING PLAN

SANJEEV VARGHESE, P.E.
COUNTY ENGINEER N.J. LICENSE NO. 40597

ANDREW M. MULDOWNY, P.E.
PROFESSIONAL ENGINEER N.J. LICENSE NO. 35760

DATE: 10/26/23

DWG. NO. 49 SCALE 1"=20' DATE OCT 2023

FILE No. PROJECT No. 728621-0000770.00

REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
Moving You Forward

ANDREW P. LARSEN, P.E.
PROFESSIONAL ENGINEER N.J. LICENSE NO. 48663

BRIGHT VIEW ENGINEERING, LLC.
70 SOUTH ORANGE AVENUE, SUITE 109
LIVINGSTON, NEW JERSEY, 07039
PHONE: (973) 228-9999
CERTIFICATION OF AUTHORIZATION # 24GA282283000

DATE: 10/25/2023

NVS, INC. PARSIPPANY, N.J. 07054
 FILE: 228621-SS-02.rvt

TO BE CONSTRUCTED

ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
60	TRAFFIC STRIPES, 4"	LF	1,375	
61	TRAFFIC STRIPES, 8"	LF	290	
62	TRAFFIC MARKINGS	SF	230	
63	TRAFFIC MARKING LINES, 24"	LF	775	
66	TRAFFIC PAINT, CURB	LF	440	
67	REGULATORY AND WARNING SIGN	SF	120	
68	OVERHEAD STREET NAME SIGNS	SF	50	

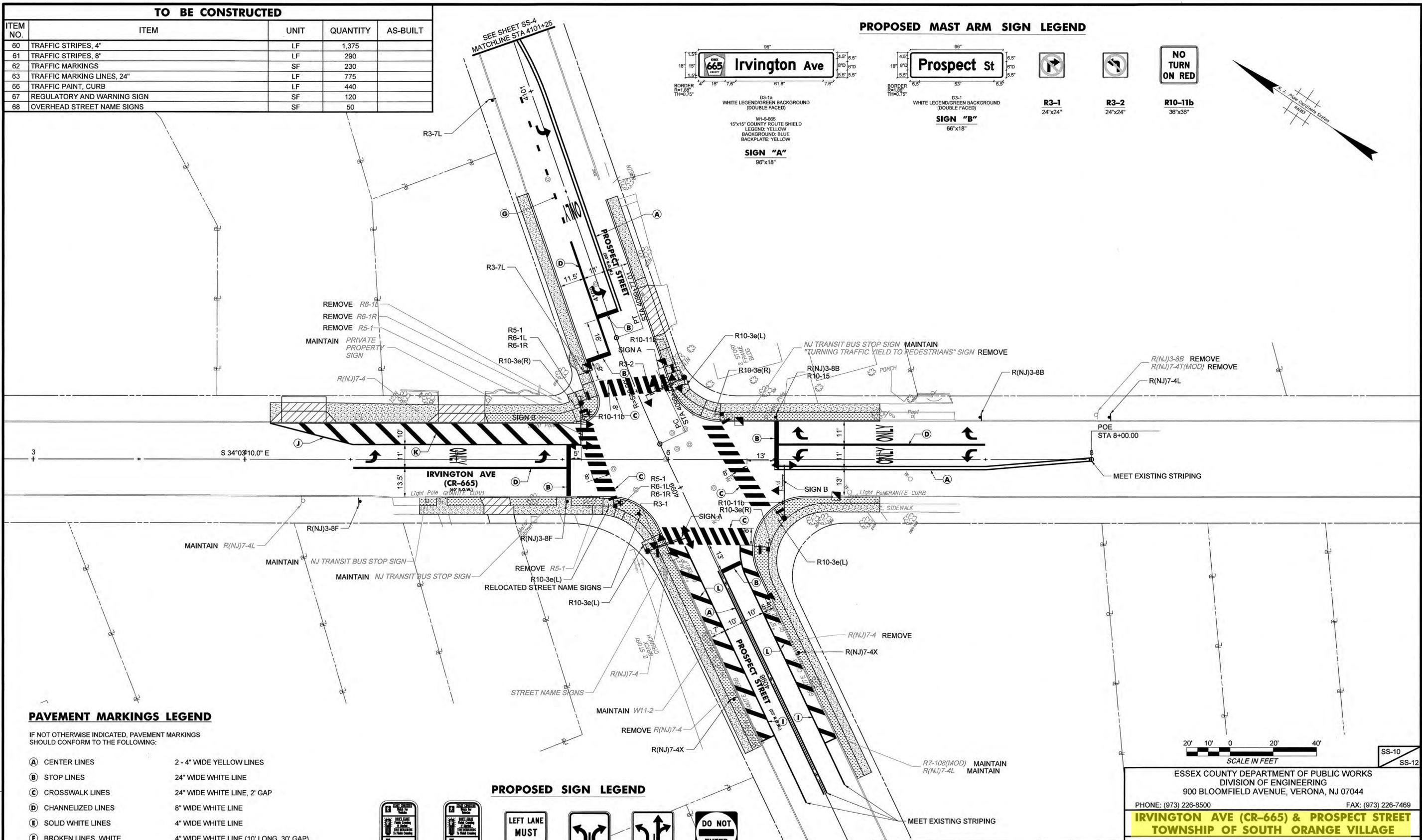
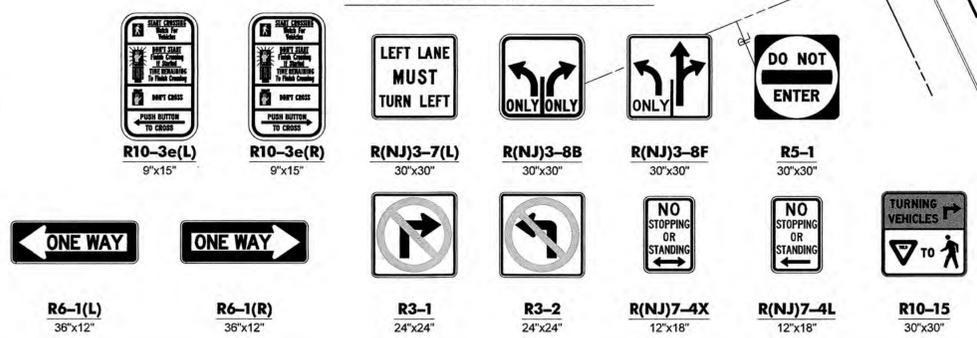
PROPOSED MAST ARM SIGN LEGEND



PAVEMENT MARKINGS LEGEND

- IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:
- (A) CENTER LINES: 2 - 4" WIDE YELLOW LINES
 - (B) STOP LINES: 24" WIDE WHITE LINE
 - (C) CROSSWALK LINES: 24" WIDE WHITE LINE, 2' GAP
 - (D) CHANNELIZED LINES: 8" WIDE WHITE LINE
 - (E) SOLID WHITE LINES: 4" WIDE WHITE LINE
 - (F) BROKEN LINES, WHITE: 4" WIDE WHITE LINE (10' LONG, 30' GAP)
 - (G) DOTTED WHITE LINE: 8" WIDE WHITE LINE (3' LONG, 9' GAP)
 - (H) LANE LINE EXTENSION THROUGH INTERSECTION: 4" WIDE WHITE LINE (2' LONG, 4' GAP)
 - (I) RIGHT EDGE LINE: 4" WIDE WHITE LINE
 - (J) LEFT EDGE LINE: 4" WIDE YELLOW LINE
 - (K) MEDIAN GORE HATCHING: 24" WIDE YELLOW LINE (@135° & 12' O.C.)
 - (L) EDGE GORE HATCHING: 24" WIDE WHITE LINE (@45° & 12' O.C.)
 - (M) PARKING STALL LINES: 4" WIDE WHITE LINE

PROPOSED SIGN LEGEND



ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

IRVINGTON AVE (CR-665) & PROSPECT STREET TOWNSHIP OF SOUTH ORANGE VILLAGE

SIGNING & STRIPING PLAN

SANJEEV VARGHESE, P.E. N.J. LICENSE NO. 40597
COUNTY ENGINEER

ANDREW M. MULDOWNEY, P.E. N.J. LICENSE NO. 35760
PROFESSIONAL ENGINEER

DATE: 10/26/23

DWG. NO. 50 SCALE 1"=20' DATE OCT 2023

PROJECT No. 728621-0000770.00

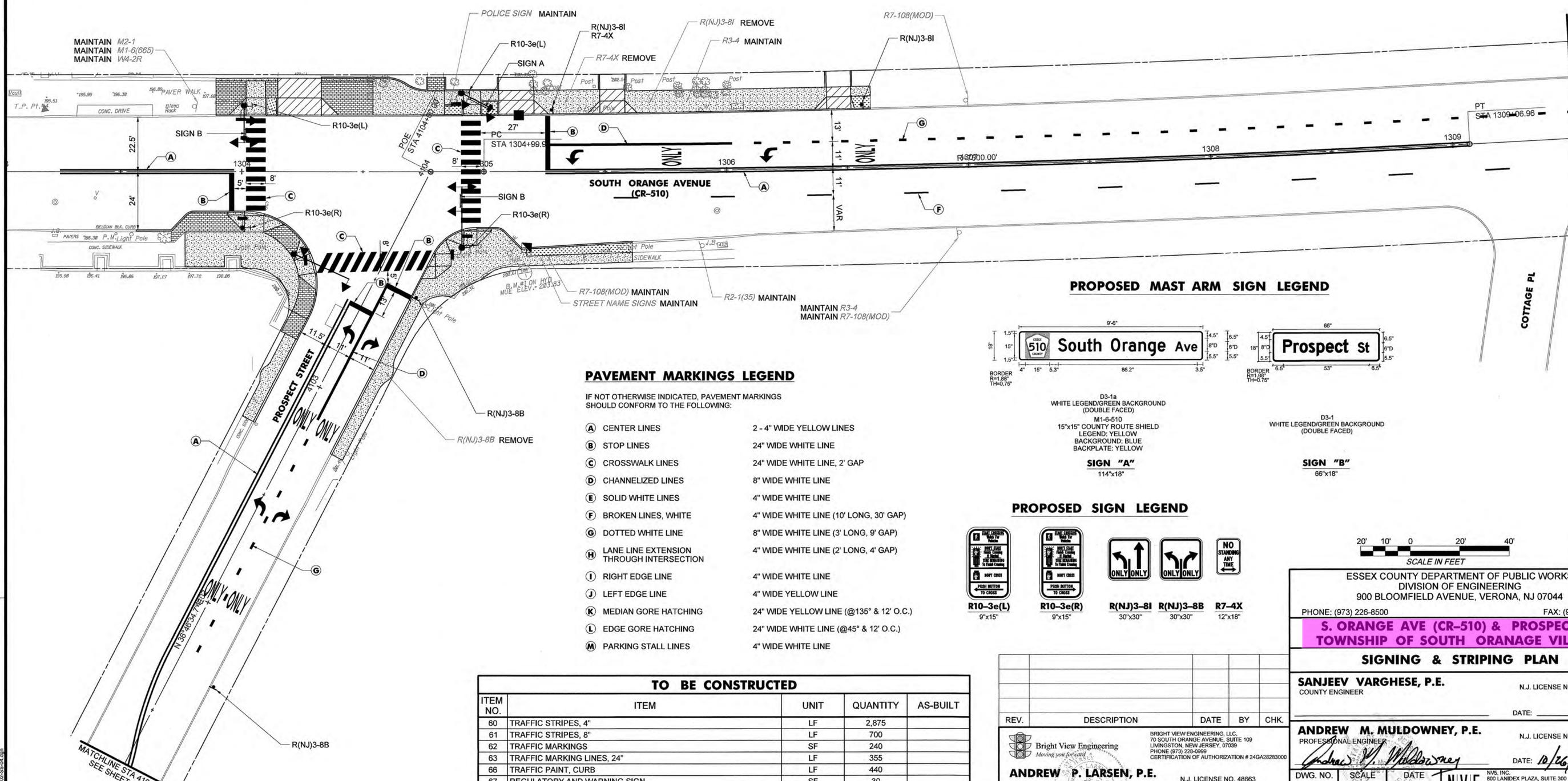
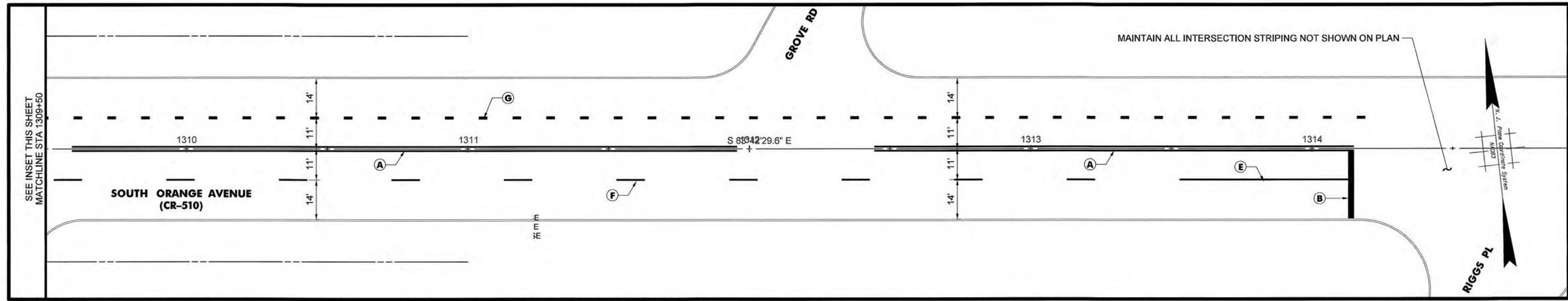
REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
70 SOUTH ORANGE AVENUE, SUITE 109
LIVINGSTON, NEW JERSEY, 07039
PHONE (973) 228-0999
CERTIFICATION OF AUTHORIZATION # 24GA28283000

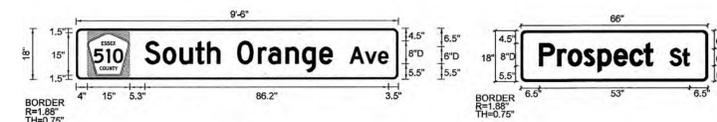
ANDREW P. LARSEN, P.E. N.J. LICENSE NO. 48863
PROFESSIONAL ENGINEER

DATE: 10/25/2023

NV5, INC. PARLISIPANY, N.J. 07054
 FILE: 228621-SS-03.DWG



PROPOSED MAST ARM SIGN LEGEND



PAVEMENT MARKINGS LEGEND

- IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:
- (A) CENTER LINES 2 - 4" WIDE YELLOW LINES
 - (B) STOP LINES 24" WIDE WHITE LINE
 - (C) CROSSWALK LINES 24" WIDE WHITE LINE, 2' GAP
 - (D) CHANNELIZED LINES 8" WIDE WHITE LINE
 - (E) SOLID WHITE LINES 4" WIDE WHITE LINE
 - (F) BROKEN LINES, WHITE 4" WIDE WHITE LINE (10' LONG, 30' GAP)
 - (G) DOTTED WHITE LINE 8" WIDE WHITE LINE (3' LONG, 9' GAP)
 - (H) LANE LINE EXTENSION THROUGH INTERSECTION 4" WIDE WHITE LINE (2' LONG, 4' GAP)
 - (I) RIGHT EDGE LINE 4" WIDE WHITE LINE
 - (J) LEFT EDGE LINE 4" WIDE YELLOW LINE
 - (K) MEDIAN GORE HATCHING 24" WIDE YELLOW LINE (@135° & 12' O.C.)
 - (L) EDGE GORE HATCHING 24" WIDE WHITE LINE (@45° & 12' O.C.)
 - (M) PARKING STALL LINES 4" WIDE WHITE LINE

PROPOSED SIGN LEGEND



TO BE CONSTRUCTED				
ITEM NO.	ITEM	UNIT	QUANTITY	AS-BUILT
60	TRAFFIC STRIPES, 4"	LF	2,875	
61	TRAFFIC STRIPES, 8"	LF	700	
62	TRAFFIC MARKINGS	SF	240	
63	TRAFFIC MARKING LINES, 24"	LF	355	
66	TRAFFIC PAINT, CURB	LF	440	
67	REGULATORY AND WARNING SIGN	SF	30	
68	OVERHEAD STREET NAME SIGNS	SF	35	

REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
 Moving you forward
ANDREW P. LARSEN, P.E.
 PROFESSIONAL ENGINEER
 N.J. LICENSE NO. 48663
 DATE: 10/25/2023

BRIGHT VIEW ENGINEERING, LLC.
 70 SOUTH ORANGE AVENUE, SUITE 109
 LIVINGSTON, NEW JERSEY, 07039
 PHONE (973) 228-0999
 CERTIFICATION OF AUTHORIZATION # 24GA28283000

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
 DIVISION OF ENGINEERING
 900 BLOOMFIELD AVENUE, VERONA, NJ 07044
 PHONE: (973) 226-8500 FAX: (973) 226-7469

S. ORANGE AVE (CR-510) & PROSPECT ST
TOWNSHIP OF SOUTH ORANGE VILLAGE

SIGNING & STRIPING PLAN

SANJEEV VARGHESE, P.E.
 COUNTY ENGINEER
 N.J. LICENSE NO. 40597

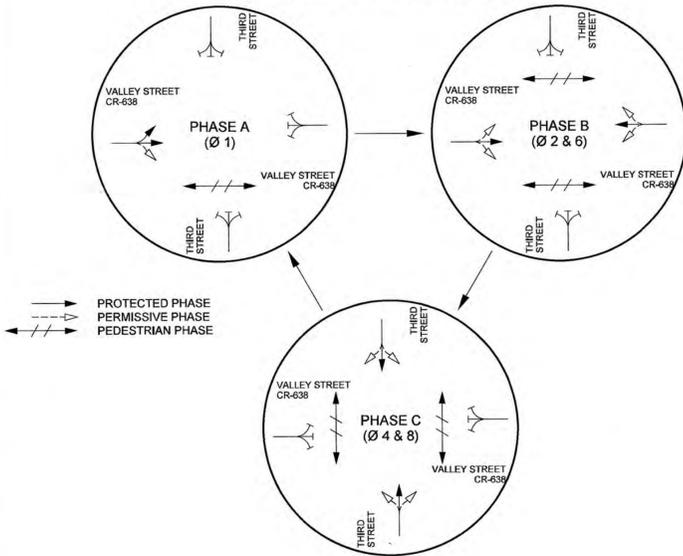
ANDREW M. MULDOWNY, P.E.
 PROFESSIONAL ENGINEER
 N.J. LICENSE NO. 35760
 DATE: 10/26/23

DWG. NO. 51 SCALE 1"=20' DATE OCT 2023

FILE NO. PROJECT No. 728621-0000770.00

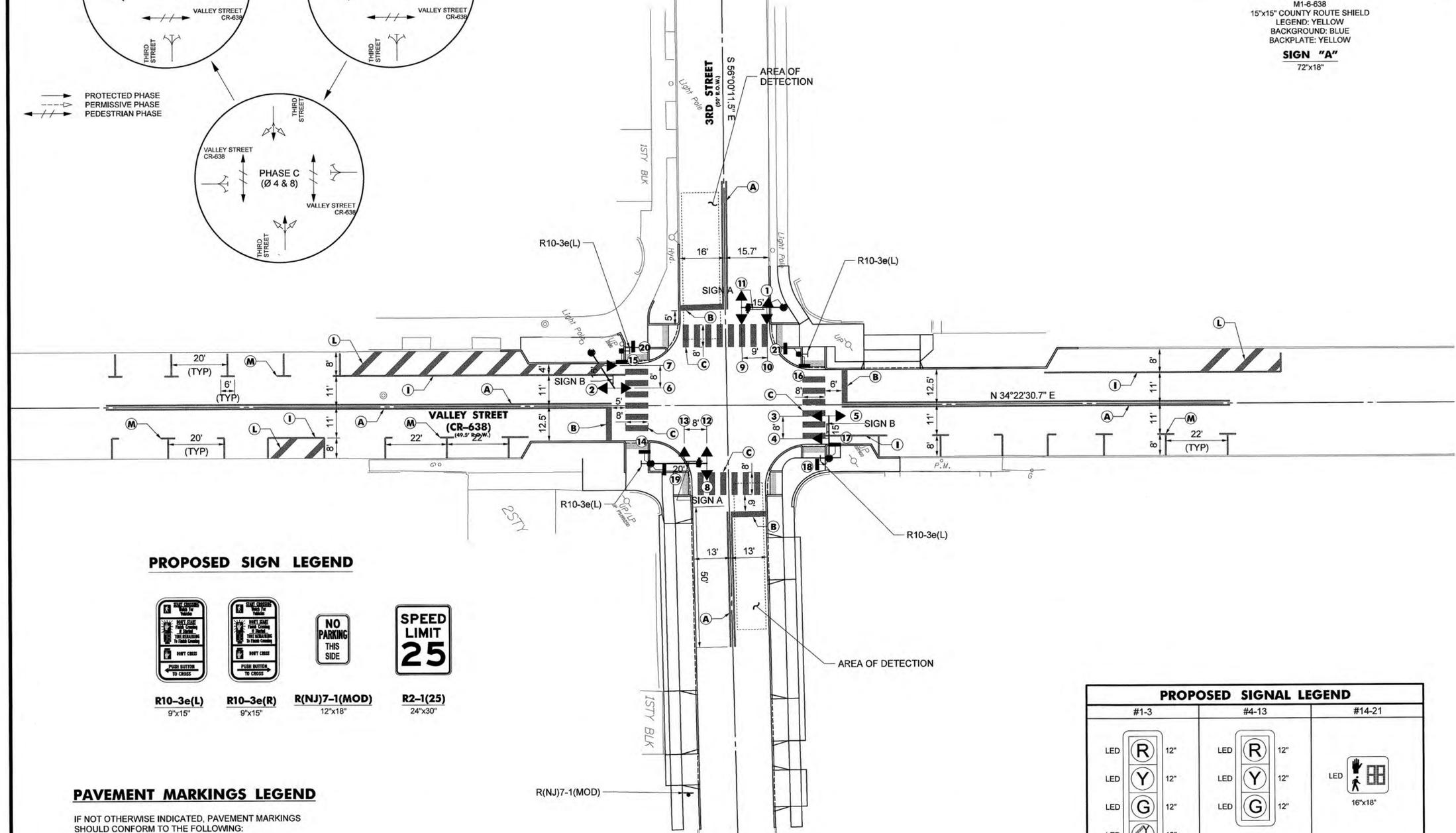
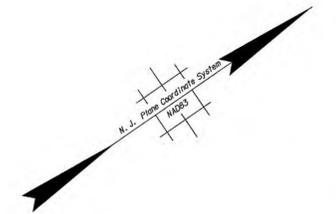
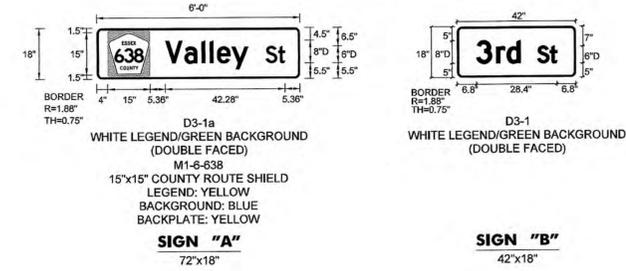
NV6, INC. PARLIPPANY, N.J. 07054
 FILE: 228621-SS-04.DWG

PHASING DIAGRAM



→ PROTECTED PHASE
 ⇄ PERMISSIVE PHASE
 ⇄ PEDESTRIAN PHASE

PROPOSED MAST ARM SIGN LEGEND



PROPOSED SIGN LEGEND

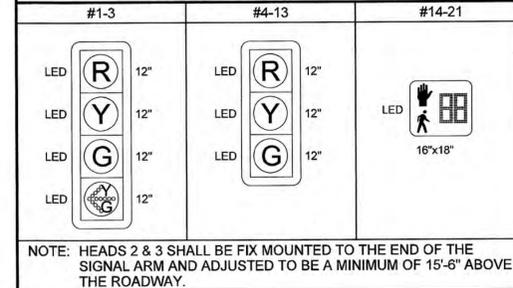


PAVEMENT MARKINGS LEGEND

IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:

- | | |
|--|---|
| (A) CENTER LINES | 2 - 4" WIDE YELLOW LINES |
| (B) STOP LINES | 24" WIDE WHITE LINE |
| (C) CROSSWALK LINES | 24" WIDE WHITE LINE, 2' GAP |
| (D) CHANNELIZED LINES | 8" WIDE WHITE LINE |
| (E) SOLID WHITE LINES | 4" WIDE WHITE LINE |
| (F) BROKEN LINES, WHITE | 4" WIDE WHITE LINE (10' LONG, 30' GAP) |
| (G) DOTTED WHITE LINE | 8" WIDE WHITE LINE (3' LONG, 9' GAP) |
| (H) LANE LINE EXTENSION THROUGH INTERSECTION | 4" WIDE WHITE LINE (2' LONG, 4' GAP) |
| (I) RIGHT EDGE LINE | 4" WIDE WHITE LINE |
| (J) LEFT EDGE LINE | 4" WIDE YELLOW LINE |
| (K) MEDIAN GORE HATCHING | 24" WIDE YELLOW LINE (@135° & 12' O.C.) |
| (L) EDGE GORE HATCHING | 24" WIDE WHITE LINE (@45° & 12' O.C.) |
| (M) PARKING STALL LINES | 4" WIDE WHITE LINE |

PROPOSED SIGNAL LEGEND



NOTE: HEADS 2 & 3 SHALL BE FIX MOUNTED TO THE END OF THE SIGNAL ARM AND ADJUSTED TO BE A MINIMUM OF 15'-6" ABOVE THE ROADWAY.



TS-7
TS-11

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
 DIVISION OF ENGINEERING
 900 BLOOMFIELD AVENUE, VERONA, NJ 07044
 PHONE: (973) 226-8500 FAX: (973) 226-7469

VALLEY STREET (CR-638) & THIRD STREET
TOWNSHIP OF SOUTH ORANGE VILLAGE

TRAFFIC SIGNAL PLAN

SANJEEV VARGHESE, P.E. COUNTY ENGINEER N.J. LICENSE NO. 40597

ANDREW M. MULDOWNNEY, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 35760
DATE: 10/26/23

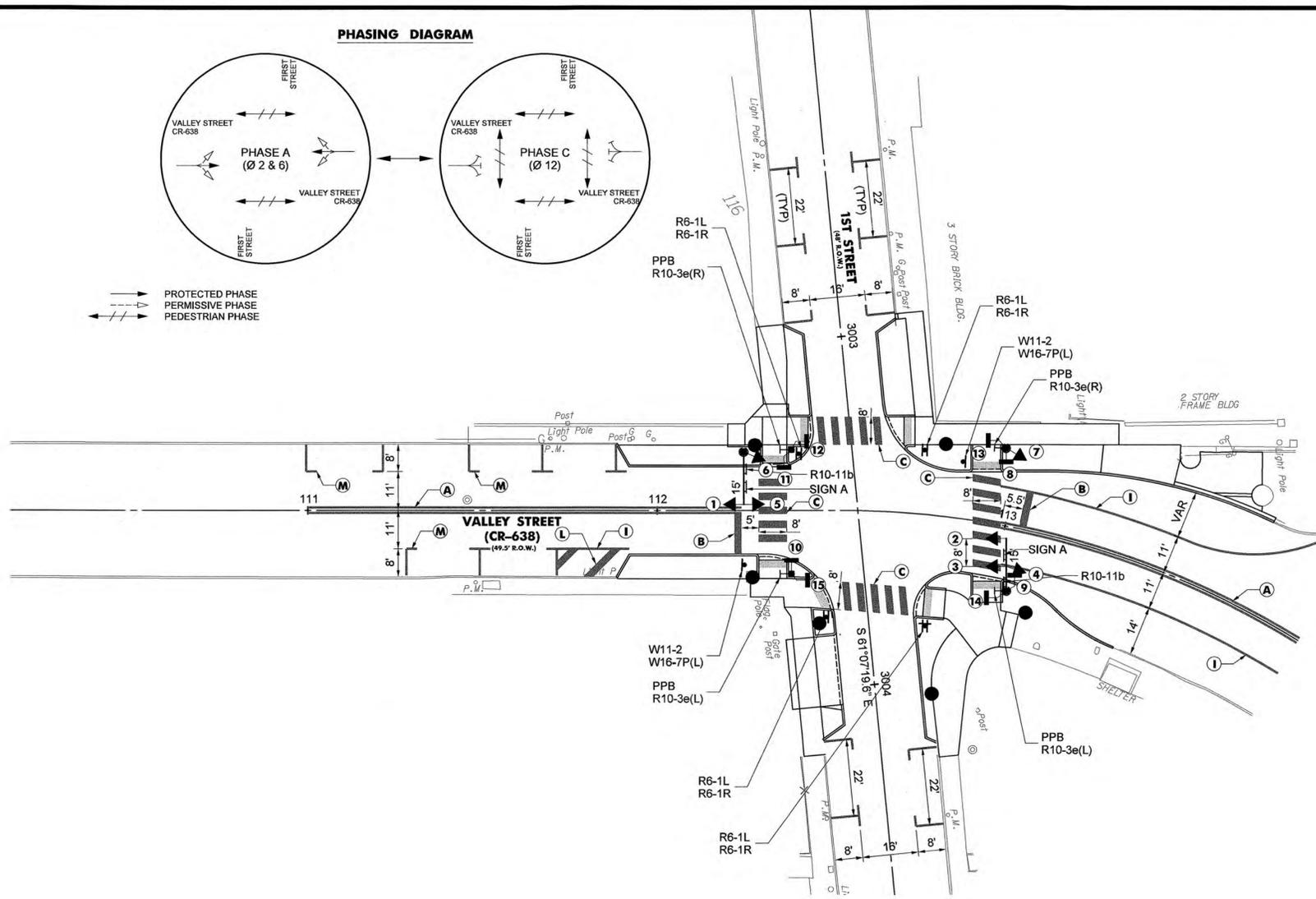
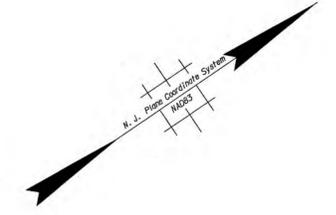
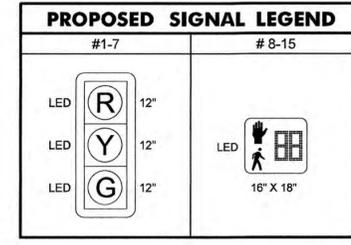
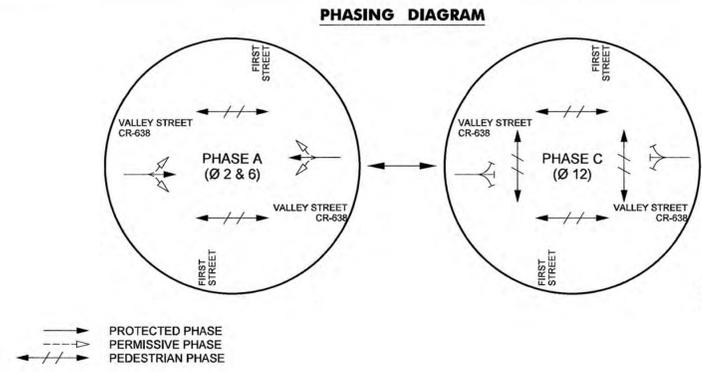
DWG. NO. 59 SCALE 1"=20' DATE OCT 2023

FILE No. PROJECT No. 728621-0000770.00

REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
 BRIGHT VIEW ENGINEERING, LLC.
 70 SOUTH ORANGE AVENUE, SUITE 109
 LIVINGSTON, NEW JERSEY, 07039
 PHONE (973) 228-0899
 CERTIFICATION OF AUTHORIZATION # 24GA28283000

ANDREW P. LARSEN, P.E. N.J. LICENSE NO. 48663
DATE: 10/25/2023

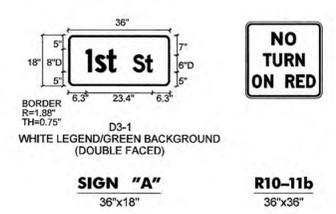


PAVEMENT MARKINGS LEGEND

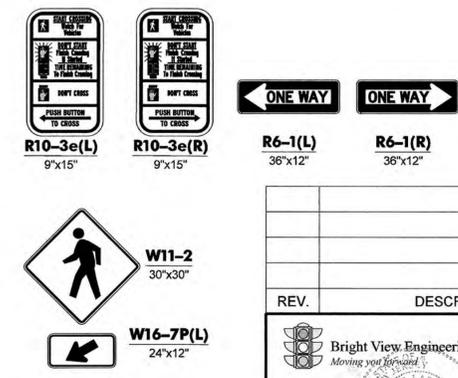
IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:

- | | |
|--|---|
| (A) CENTER LINES | 2 - 4" WIDE YELLOW LINES |
| (B) STOP LINES | 24" WIDE WHITE LINE |
| (C) CROSSWALK LINES | 24" WIDE WHITE LINE, 2' GAP |
| (D) CHANNELIZED LINES | 8" WIDE WHITE LINE |
| (E) SOLID WHITE LINES | 4" WIDE WHITE LINE |
| (F) BROKEN LINES, WHITE | 4" WIDE WHITE LINE (10' LONG, 30' GAP) |
| (G) DOTTED WHITE LINE | 8" WIDE WHITE LINE (3' LONG, 9' GAP) |
| (H) LANE LINE EXTENSION THROUGH INTERSECTION | 4" WIDE WHITE LINE (2' LONG, 4' GAP) |
| (I) RIGHT EDGE LINE | 4" WIDE WHITE LINE |
| (J) LEFT EDGE LINE | 4" WIDE YELLOW LINE |
| (K) MEDIAN GORE HATCHING | 24" WIDE YELLOW LINE (@135° & 12' O.C.) |
| (L) EDGE GORE HATCHING | 24" WIDE WHITE LINE (@45° & 12' O.C.) |
| (M) PARKING STALL LINES | 4" WIDE WHITE LINE |

PROPOSED MAST ARM SIGN LEGEND



PROPOSED SIGN LEGEND



TS-8 TS-11

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

**VALLEY STREET (CR-638) & FIRST STREET
TOWNSHIP OF SOUTH ORANGE VILLAGE**

TRAFFIC SIGNAL PLAN

SANJEEV VARGHESE, P.E. COUNTY ENGINEER N.J. LICENSE NO. 40597
DATE: _____

ANDREW M. MULDOWNEY, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 35760
DATE: 10/26/23

DWG. NO. 60 SCALE: 1"=20' DATE: OCT 2023

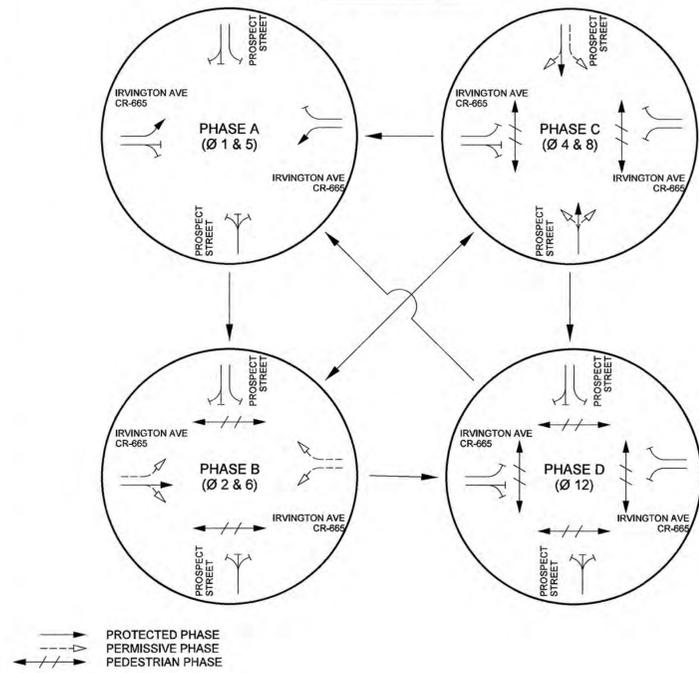
FILE No. PROJECT No. 728621-0000770.00

REV.	DESCRIPTION	DATE	BY	CHK.

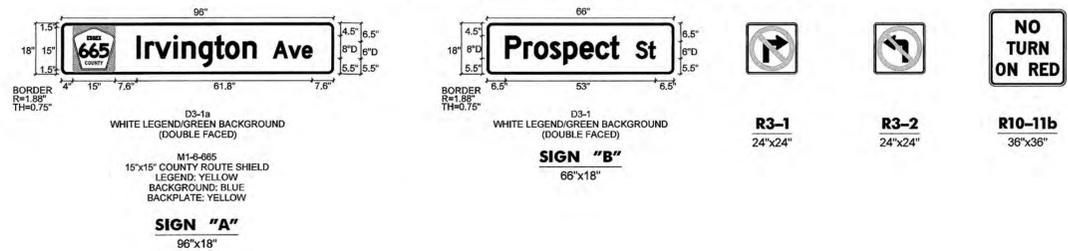
Bright View Engineering
70 SOUTH ORANGE AVENUE, SUITE 109
LIVINGSTON, NEW JERSEY, 07039
PHONE (973) 228-0999
CERTIFICATION OF AUTHORIZATION # 24GA28283000

ANDREW P. LARSEN, P.E. N.J. LICENSE NO. 48863
DATE: 10/25/2023

PHASING DIAGRAM



PROPOSED MAST ARM SIGN LEGEND

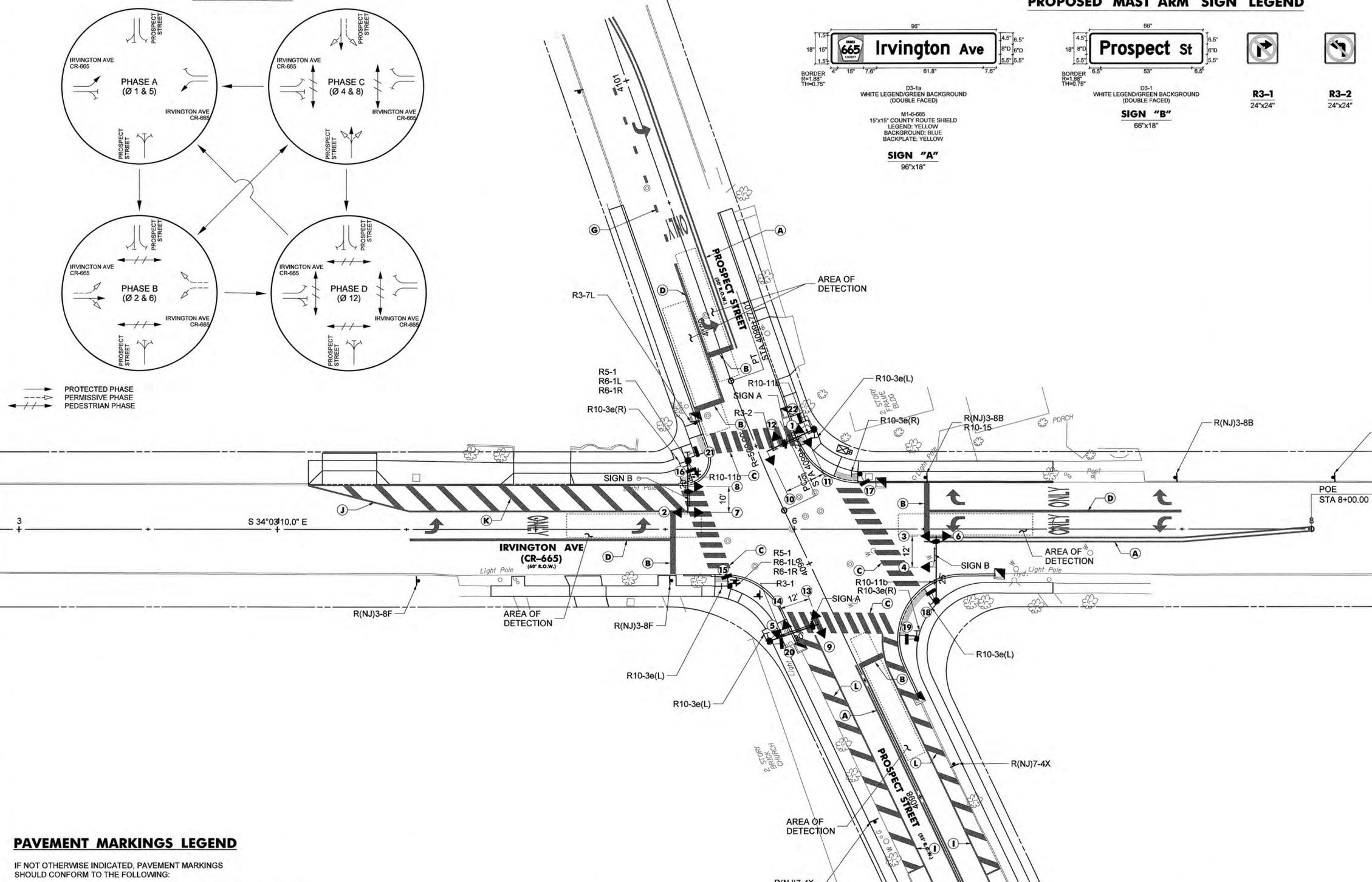


PROPOSED SIGNAL LEGEND

#1-3, 5-7	#4,8-14	#15-22
LED R 12"	LED R 12"	LED 16"x18"
LED Y 12"	LED Y 12"	
LED G 12"	LED G 12"	
LED 12"		

NOTE: HEADS 2, 3, 6, & 7 SHALL BE FIX MOUNTED TO THE END OF THE SIGNAL ARM AND ADJUSTED TO BE A MINIMUM OF 15'-6" ABOVE THE ROADWAY.

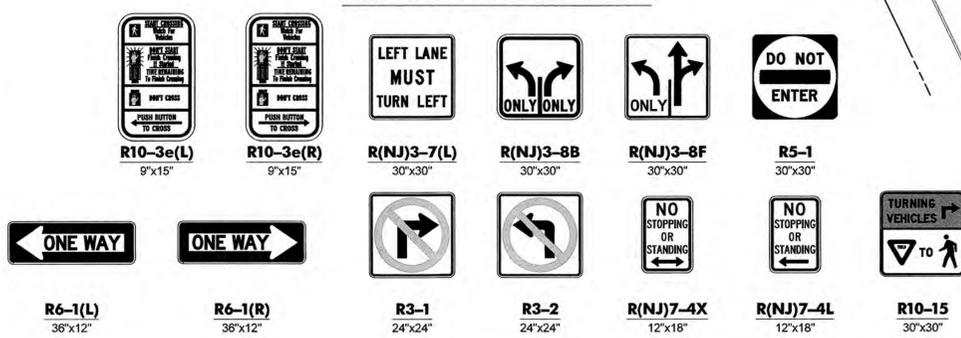
PROTECTED PHASE
 PERMISSIVE PHASE
 PEDESTRIAN PHASE



PAVEMENT MARKINGS LEGEND

- IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:
- (A) CENTER LINES: 2 - 4" WIDE YELLOW LINES
 - (B) STOP LINES: 24" WIDE WHITE LINE
 - (C) CROSSWALK LINES: 24" WIDE WHITE LINE, 2' GAP
 - (D) CHANNELIZED LINES: 8" WIDE WHITE LINE
 - (E) SOLID WHITE LINES: 4" WIDE WHITE LINE
 - (F) BROKEN LINES, WHITE: 4" WIDE WHITE LINE (10' LONG, 30' GAP)
 - (G) DOTTED WHITE LINE: 8" WIDE WHITE LINE (3' LONG, 9' GAP)
 - (H) LANE LINE EXTENSION THROUGH INTERSECTION: 4" WIDE WHITE LINE (2' LONG, 4' GAP)
 - (I) RIGHT EDGE LINE: 4" WIDE WHITE LINE
 - (J) LEFT EDGE LINE: 4" WIDE YELLOW LINE
 - (K) MEDIAN GORE HATCHING: 24" WIDE YELLOW LINE (@135° & 12' O.C.)
 - (L) EDGE GORE HATCHING: 24" WIDE WHITE LINE (@45° & 12' O.C.)
 - (M) PARKING STALL LINES: 4" WIDE WHITE LINE

PROPOSED SIGN LEGEND



ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
 DIVISION OF ENGINEERING
 900 BLOOMFIELD AVENUE, VERONA, NJ 07044
 PHONE: (973) 226-8500 FAX: (973) 226-7469

IRVINGTON AVE (CR-665) & PROSPECT STREET
 TOWNSHIP OF SOUTH ORANGE VILLAGE

TRAFFIC SIGNAL PLAN

SANJEEV VARGHESE, P.E. COUNTY ENGINEER N.J. LICENSE NO. 40597
 DATE: _____

ANDREW M. MULDOWNEY, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 35760
 DATE: 10/26/23

REV. DESCRIPTION DATE BY CHK.

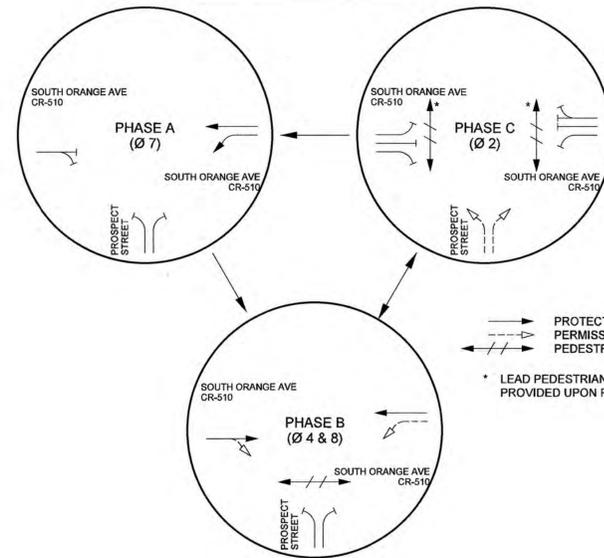
BRIGHT VIEW ENGINEERING
 70 SOUTH ORANGE AVENUE, SUITE 109
 LIVINGSTON, NEW JERSEY, 07039
 PHONE (973) 228-0999
 CERTIFICATION OF AUTHORIZATION # 24GA26283000

ANDREW P. LARSEN, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 48663
 DATE: 10/25/2023

NV5, INC.
 800 LANDEX PLAZA, SUITE 300
 PARLISSEPPAN, NEW JERSEY, 07054
 PHONE (973) 946-5600, FAX (973) 984-5421
 CERTIFICATION OF AUTHORIZATION # 24GA27930500

FILE NO. _____ PROJECT No. 728621-0000770.00

PHASING DIAGRAM



PROTECTED PHASE
PERMISSIVE PHASE
PEDESTRIAN PHASE

* LEAD PEDESTRIAN INTERVAL SHALL BE PROVIDED UPON PEDESTRIAN ACTUATION

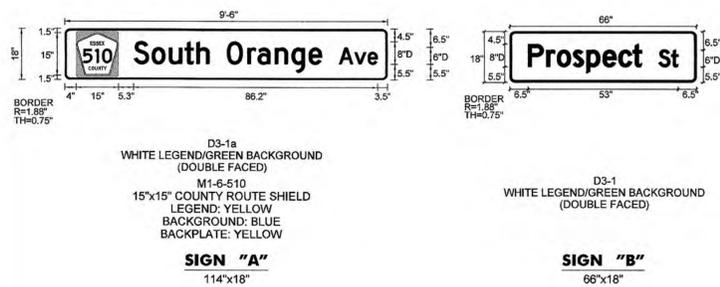
PROPOSED SIGNAL LEGEND		
#1-3,7-10	#4-6	#11-16
LED R 12"	LED R 12"	LED 16"x18"
LED Y 12"	LED Y 12"	
LED G 12"	LED G 12"	

NOTE: HEADS 5 & 6 SHALL BE FIX MOUNTED TO THE END OF THE SIGNAL ARM AND ADJUSTED TO BE A MINIMUM OF 15'-6" ABOVE THE ROADWAY.

PROPOSED SIGN LEGEND



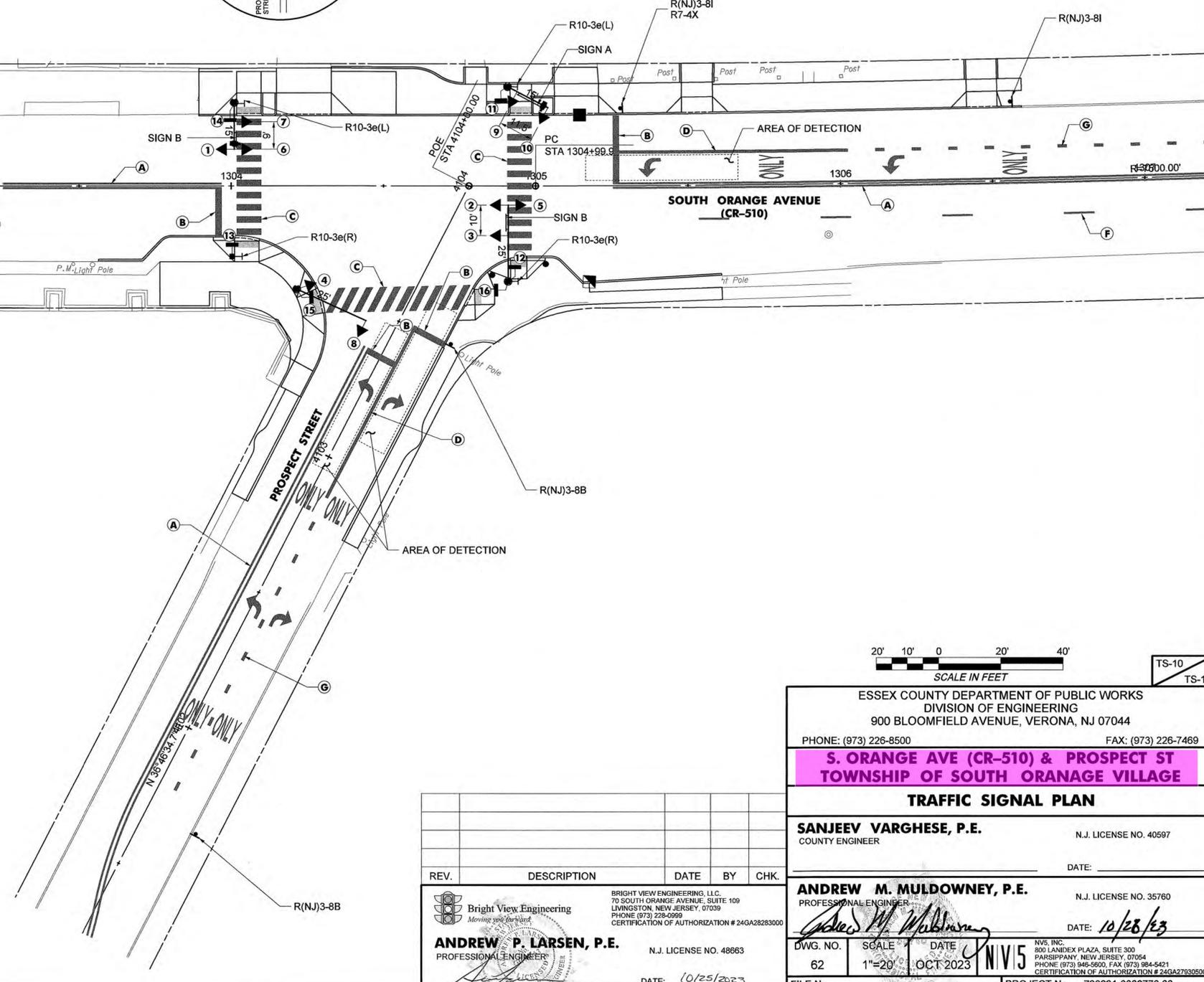
PROPOSED MAST ARM SIGN LEGEND



PAVEMENT MARKINGS LEGEND

IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:

- (A) CENTER LINES 2 - 4" WIDE YELLOW LINES
- (B) STOP LINES 24" WIDE WHITE LINE
- (C) CROSSWALK LINES 24" WIDE WHITE LINE, 2' GAP
- (D) CHANNELIZED LINES 8" WIDE WHITE LINE
- (E) SOLID WHITE LINES 4" WIDE WHITE LINE
- (F) BROKEN LINES, WHITE 4" WIDE WHITE LINE (10' LONG, 30' GAP)
- (G) DOTTED WHITE LINE 8" WIDE WHITE LINE (3' LONG, 9' GAP)
- (H) LANE LINE EXTENSION THROUGH INTERSECTION 4" WIDE WHITE LINE (2' LONG, 4' GAP)
- (I) RIGHT EDGE LINE 4" WIDE WHITE LINE
- (J) LEFT EDGE LINE 4" WIDE YELLOW LINE
- (K) MEDIAN GORE HATCHING 24" WIDE YELLOW LINE (@135° & 12' O.C.)
- (L) EDGE GORE HATCHING 24" WIDE WHITE LINE (@45° & 12' O.C.)
- (M) PARKING STALL LINES 4" WIDE WHITE LINE



ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS DIVISION OF ENGINEERING 900 BLOOMFIELD AVENUE, VERONA, NJ 07044 PHONE: (973) 226-8500 FAX: (973) 226-7469	
S. ORANGE AVE (CR-510) & PROSPECT ST TOWNSHIP OF SOUTH ORANAGE VILLAGE	
TRAFFIC SIGNAL PLAN	
SANJEEV VARGHESE, P.E. COUNTY ENGINEER	N.J. LICENSE NO. 40597 DATE:
ANDREW M. MULDOWNEY, P.E. PROFESSIONAL ENGINEER	N.J. LICENSE NO. 35760 DATE: 10/28/23
DWG. NO. 62 SCALE 1"=20' DATE OCT 2023	NV15 NYS, INC. 800 LANDEX PLAZA, SUITE 300 PARLISIPPANY, NEW JERSEY, 07054 PHONE (973) 946-5600, FAX (973) 984-5421 CERTIFICATION OF AUTHORIZATION # 24GA27630500
FILE No.	PROJECT No. 728621-0000770.00

REV.	DESCRIPTION	DATE	BY	CHK.

Bright View Engineering
 70 SOUTH ORANGE AVENUE, SUITE 109
 LIVINGSTON, NEW JERSEY, 07039
 PHONE (973) 228-0999
 CERTIFICATION OF AUTHORIZATION # 24GA28283000

ANDREW P. LARSEN, P.E.
 PROFESSIONAL ENGINEER
 N.J. LICENSE NO. 48863
 DATE: 10/25/2023

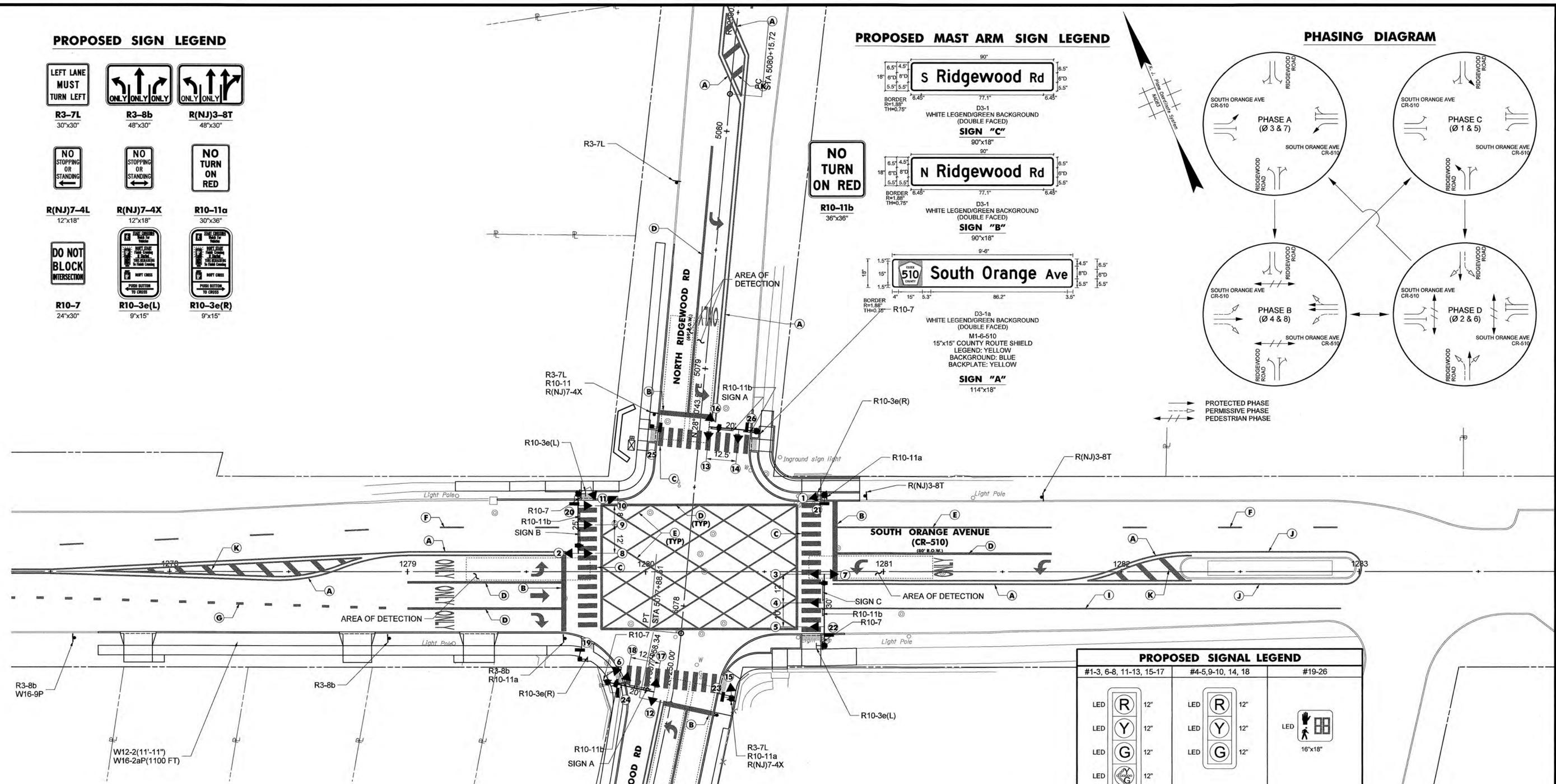
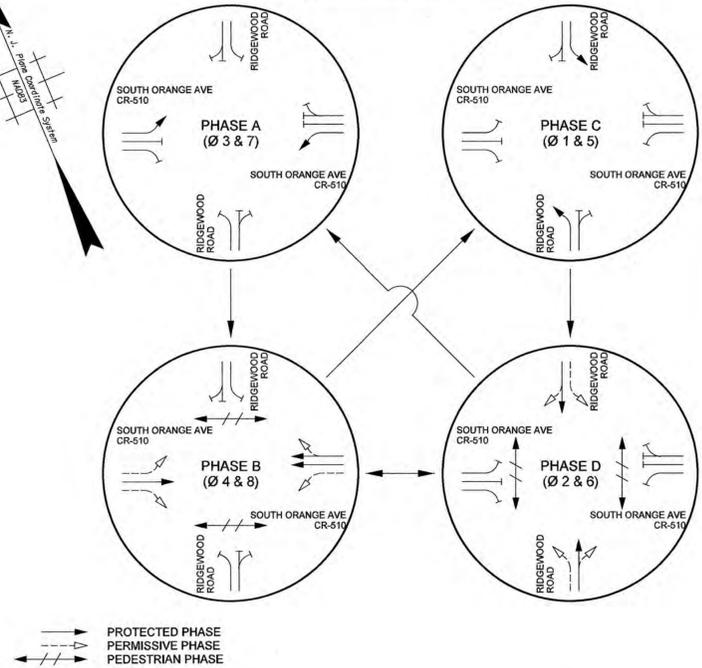
PROPOSED SIGN LEGEND

R3-7L 30"x30"	R3-8b 48"x30"	R(NJ)3-8T 48"x30"
R(NJ)7-4L 12"x18"	R(NJ)7-4X 12"x18"	R10-11a 30"x36"
R10-7 24"x30"	R10-3e(L) 9"x15"	R10-3e(R) 9"x15"

PROPOSED MAST ARM SIGN LEGEND

S Ridgewood Rd 90"x18" WHITE LEGEND/GREEN BACKGROUND (DOUBLE FACED) SIGN "C"	N Ridgewood Rd 90"x18" WHITE LEGEND/GREEN BACKGROUND (DOUBLE FACED) SIGN "B"	510 South Orange Ave 114"x18" D3-1a WHITE LEGEND/GREEN BACKGROUND (DOUBLE FACED) M1-6-510 15'x15' COUNTY ROUTE SHIELD LEGEND: YELLOW BACKGROUND; BLUE BACKPLATE; YELLOW SIGN "A"

PHASING DIAGRAM



PAVEMENT MARKINGS LEGEND

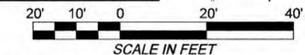
IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:

- | | |
|--|---|
| (A) CENTER LINES | 2 - 4" WIDE YELLOW LINES |
| (B) STOP LINES | 24" WIDE WHITE LINE |
| (C) CROSSWALK LINES | 24" WIDE WHITE LINE, 2' GAP |
| (D) CHANNELIZED LINES | 8" WIDE WHITE LINE |
| (E) SOLID WHITE LINES | 4" WIDE WHITE LINE |
| (F) BROKEN LINES, WHITE | 4" WIDE WHITE LINE (10' LONG, 30' GAP) |
| (G) DOTTED WHITE LINE | 8" WIDE WHITE LINE (3' LONG, 9' GAP) |
| (H) LANE LINE EXTENSION THROUGH INTERSECTION | 4" WIDE WHITE LINE (2' LONG, 4' GAP) |
| (I) RIGHT EDGE LINE | 4" WIDE WHITE LINE |
| (J) LEFT EDGE LINE | 4" WIDE YELLOW LINE |
| (K) MEDIAN GORE HATCHING | 24" WIDE YELLOW LINE (@135° & 12' O.C.) |
| (L) EDGE GORE HATCHING | 24" WIDE WHITE LINE (@45° & 12' O.C.) |
| (M) PARKING STALL LINES | 4" WIDE WHITE LINE |

PROPOSED SIGNAL LEGEND

#1-3, 6-8, 11-13, 15-17	#4-5, 9-10, 14, 18	#19-26
LED R 12" LED Y 12" LED G 12" LED 12"	LED R 12" LED Y 12" LED G 12"	LED 16"x18"

NOTE: HEADS 2, 3, 7, 8, 12, 13, 16, & 17 SHALL BE FIX MOUNTED TO THE END OF THE SIGNAL ARM AND ADJUSTED TO BE A MINIMUM OF 15'-6" ABOVE THE ROADWAY.



ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973) 226-8500 FAX: (973) 226-7469

S. ORANGE AVE (CR-510) & RIDGEWOOD RD
TOWNSHIP OF SOUTH ORANGE VILLAGE

TRAFFIC SIGNAL PLAN

SANJEEV VARGHESE, P.E. COUNTY ENGINEER N.J. LICENSE NO. 40697
DATE: _____

ANDREW M. MULDOWNEY, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 35760
DATE: 10/26/23

REV. DESCRIPTION DATE BY CHK.

ANDREW P. LARSEN, P.E. PROFESSIONAL ENGINEER N.J. LICENSE NO. 48663
DATE: 10/25/2023

BRIGHT VIEW ENGINEERING, L.L.C.
70 SOUTH ORANGE AVENUE, SUITE 109
LIVINGSTON, NEW JERSEY, 07039
PHONE (973) 228-0999
CERTIFICATION OF AUTHORIZATION # 24GA28283000

DWG. NO. 63 SCALE 1"=20' DATE OCT 2023 PROJECT No. 728621-0000770.00