

- 2. IF UTILITY WORK IS REQUIRED, THE UTILITY COMPANIES MAY PERFORM WORK ON THEIR OWN SCHEDULE, IMPLEMENTING THEIR OWN MPT SCHEMES. THESE ARE TO MEET THE NJDOT STANDARD DETAILS. NOTIFICATION SHALL BE PROVIDED TO THE UTILITY COMPANIES AS NOTED IN THE SPECIFICATIONS.
- 3. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART 6 "TEMPORARY TRAFFIC CONTROL", UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS.
- 4. WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE RESIDENT ENGINEER.
- 5. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE RE.
- 6. ANY WORK ZONES/CLOSURES SHALL MAINTAIN ACCESS TO INTERSECTING STREETS.
- 7. MAINTAIN STORMWATER DRAINAGE DURING CONSTRUCTION.
- 8. SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN ARE TO BE PROVIDED WITH AT LEAST ONE W-201F SIGN (ROAD WORK AHEAD) AS A MINIMUM.
- 9. PEDESTRIAN ACCESS TO BUSINESSES WITHIN WORK AREA SHALL BE MAINTAINED DURING BUSINESS HOURS. CONSTRUCT AND MAINTAIN TEMPORARY RAMPS THAT ACCOMMODATE PEDESTRIAN ACCESS DURING ACTIVE WORK ZONES.
- 10. WHERE THE WORK WITHIN THE LIMITS OF A DRIVEWAY (INCLUDING SIDEWALK CURING) CANNOT BE COMPLETED IN ONE WORK SHIFT, COVER THE WORK AREA WITH STEEL PLATES AT THE END OF THE WORK SHIFT TO MAINTAIN DRIVEWAY ACCESS.
- 11. TRAFFIC IMPACT NOTICES AND CHANGES
- A. TERMS:

WHEN THE FOLLOWING TERMS ARE USED, THE INTENT AND MEANING SHALL BE AS FOLLOWS:

i. IMPACTS TO NORMAL TRAFFIC FLOW — WORK THAT REQUIRES A PORTION OF THE PAVED ROADWAY BEING BLOCKED OR CLOSED WITH SAFETY DEVICES OR VEHICLES, INCLUDING, BUT NOT LIMITED TO, FULL OR PARTIAL LANE CLOSURES, FULL OR PARTIAL RAMP CLOSURES, SHOULDER CLOSURES, MOVING OPERATIONS SUCH AS TRAFFIC STRIPING OR SWEEPING, LANE SHIFTS, OR ALTERNATING TRAFFIC. THIS APPLIES EVEN WHEN DETOURS ARE PROVIDED.

ii. TEMPORARY LANE CLOSURES — WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH IS ROUTINELY SET UP AND REMOVED ON A DAILY BASIS.

iii. PERMANENT LANE CLOSURES — WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH REMAINS IN PLACE CONTINUOUSLY FOR 24 HOURS OR MORE.

B. ADVANCE NOTICES:

FOR THE INITIAL START OF WORK THAT REQUIRES "IMPACTS TO NORMAL TRAFFIC FLOW", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING, ON THE ADVANCE NJDOT FORM TO—103 OF THE PROPOSED DATE. THE NOTICE IS TO BE SUBMITTED AT LEAST TWENTY—EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, BEFORE THE PROPOSED DATE. START OF WORK THAT IMPACTS NORMAL TRAFFIC FLOW WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR IS TO CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE SEVEN (AND/OR FOURTEEN) CALENDAR DAYS BEFORE STARTING THE ESTABLISHMENT OF THE TRAFFIC CONTROL MEASURES FOR THE TRAFFIC IMPACT. THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

FOR A "PERMANENT LANE CLOSURE", THE CONTRACTOR IS TO NOTIFY THE RE IN WRITING, ON ADVANCE FORM TO-103, OF THE PROPOSED DATE A NEW TRAFFIC PATTERN WILL BE ESTABLISHED. THE NOTICE IS TO BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, IN ADVANCE OF THE PROPOSED DATE. START OF A NEW TRAFFIC PATTERN WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR IS TO CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE OF THE NEW TRAFFIC PATTERN SEVEN (AND/OR FOURTEEN) DAYS BEFORE STARTING TRAFFIC CONTROL MEASURES FOR THE ESTABLISHMENT OF THE NEW PATTERN. THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CANNOT BE COMPLETED ON THE PROPOSED DATE.

ADVANCE NOTICES SENT PRIOR TO THE PRE—CONSTRUCTION MEETING ARE TO BE ADDRESSED TO THE CONTACT PERSON AS SPECIFIED IN SUBSECTION 100.04 OF THE SPECIAL PROVISIONS.

C. PROGRESS NOTICES:

ALL "IMPACTS TO NORMAL TRAFFIC FLOW" SCHEDULED FOR THE SEVEN DAY PERIOD STARTING ON THE FOLLOWING MONDAY ARE TO BE SUBMITTED TO THE RE BY 9:00 AM OF EACH FRIDAY ON WEEKLY FORM TO-100 PROVIDED BY THE DEPARTMENT.

EACH DAY OF "TEMPORARY LANE CLOSURES" ARE TO BE SUBMITTED TO THE RE BY 9:00 AM THE DAY IN ADVANCE OF THE START OF THOSE OPERATIONS ON DAILY FORM 10-101 PROVIDED BY THE DEPARTMENT.

"TEMPORARY LANE CLOSURES" FOR WEEKENDS ARE TO BE SUBMITTED TO THE RE BY 9:00 AM ON THE IMMEDIATELY PRECEDING FRIDAY ON THE DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.

SUGGESTED CONSTRUCTION STAGING SEQUENCE:

NOTES:

- 1. SOME CONSTRUCTION ACTIVITIES MAY BE SUBJECT TO TIMING RESTRICTIONS, SEE SPECIAL PROVISIONS.
- 2. ESTABLISH PEDESTRIAN DETOUR(S) PRIOR TO INITIATING REMOVAL OF EXISTING SIDEWALK. CURB RAMPS AND CURB.
- 3. STAGE/STAGGER REMOVAL OF EXISTING CURB AND SIDEWALK, AND CONSTRUCTION OF PROPOSED CURB AND SIDEWALK SUCH THAT PEDESTRIAN DETOURS WILL NOT EXCEED ONE (1) CITY BLOCK.
- 4. COORDINATE ALL SHOULDER CLOSURES, LANE AND SHOULDER CLOSURES, AND DETOURS WITH THE CITY OF BRIGANTINE POLICE DEPARTMENT.

PRE-STAGE 1:

1. INSTALL UNDERGROUND CONDUIT, JUNCTION BOXES AND ELECTRICAL LIGHTING FOUNDATIONS.

STAGE 1:

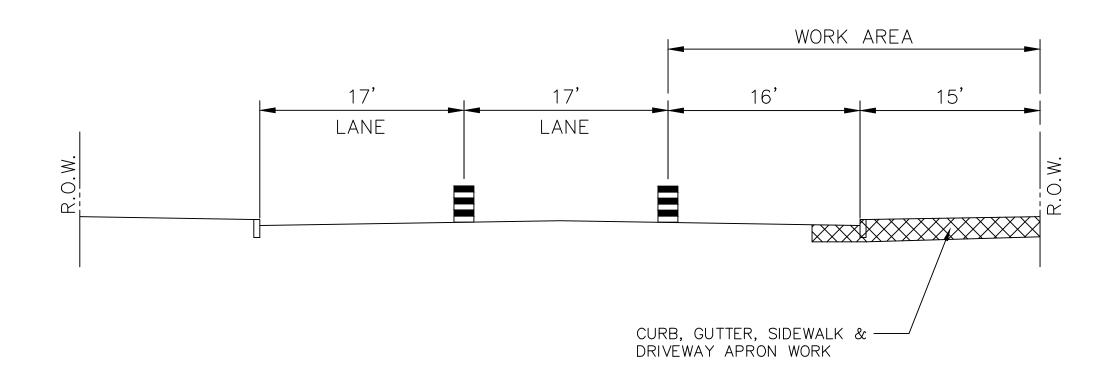
- 1. ESTABLISH DETOUR AND TRAFFIC CONTROL DEVICES.
- 2. REMOVE EXISTING CURB, GUTTER, SIDEWALK AND DRIVEWAY APRONS ON THE SOUTH SIDE OF BRIGANTINE BOULEVARD.
- 3. EXCAVATE AND GRADE.
- 4. CONSTRUCT PROPOSED CURB AND GUTTER, SIDEWALK, AND DRIVEWAY APRONS.

STAGE 2:

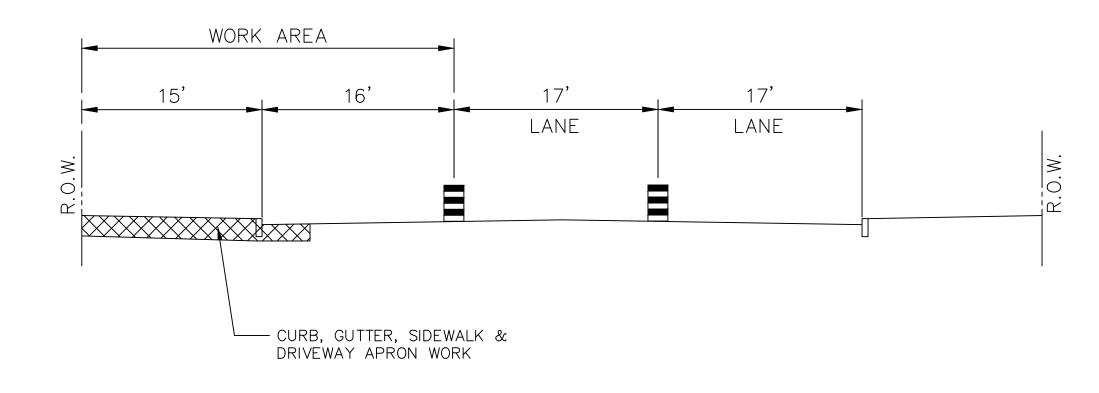
- 1. ESTABLISH DETOUR AND TRAFFIC CONTROL DEVICES.
- 2. REMOVE EXISTING CURB, GUTTER, SIDEWALK AND DRIVEWAY APRONS ON THE NORTH SIDE OF BRIGANTINE BOULEVARD.
- 3. EXCAVATE AND GRADE.
- 4. CONSTRUCT PROPOSED CURB AND GUTTER, SIDEWALK, DRIVEWAY APRONS AND BIKE RACKS.
- 5. RESTRIPE ROADWAY

STAGE 3:

- 1. INSTALL DECORATIVE LIGHTING & METER CABINET.
- 2. PLANT LANDSCAPING TREES & GROUND COVER.
- 3. INSTALL TRASH RECEPTACLES & BENCHES.



STAGE 1 *LOOKING EAST*



STAGE 2 LOOKING EAST



NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

LIGHTHOUSE DISTRICT STREETSCAPE IMPROVEMENTS CITY OF BRIGANTINE

GREENMAN-PEDERSEN, INC.

CERTIFICATION OF AUTHORIZATION NO. 24GA27959500

BRIAN W. MAUSERT NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE04647900



esign Assistance TP—173\2019707.00 Brigantine Lighthouse Dist Streetscape Proj\CaddHwy\12 TCP\Traffic Control Plans.dwg Aug 29, 2022 — 2:40p

CITY OF BRIGANTINE COUNTY OF ATLANTIC

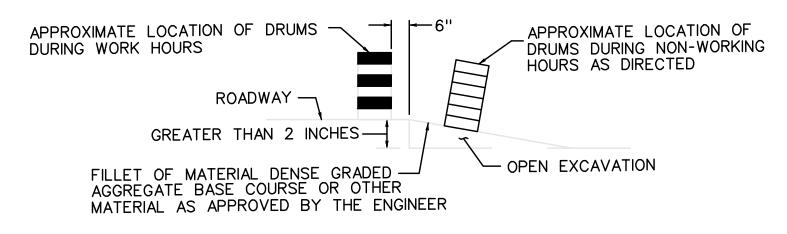
	SIGN DESIGNATION AND SIZE	AREA (SF)	REQ'D QUANTITY (MAX. #	TOTAL AREA (SF)		SIGN DESIGNATION AND SIZE	AREA (SF)	REQ'D QUANTITY (MAX. #	TOTAL AREA (SF)
END ROAD WORK	G20-2A 48" X 24"	8	ANY STAGE)	80		W8-9a 48" X 48"	16	ANY STAGE)	32
END DETOUR	M4-8a 24" X 18"	3	1	3	GROOVED PAVEMENT AHE AD	W8-14a 48" X 48"	16	2	32
DETOUR +	M4-9L 30" X 24"	5	1	5	ROAD WORK 1500 FT	W20-1A 48" X 48"	16	4	64
DETOUR →	M4-9R 30" X 24"	5	2	10	ROAD WORK 5%4 MILE	W20-1D 48" X 48"	16	4	64
DETOUR	M4-9X 30" X 24"	5	1	5	ROAD WORK AHEAD	W20-1F 48" X 48"	16	7	112
DETOUR	M4-9b(L) 30" X 24"	5	4	20	DETOUR AHEAD	W20-2F 48"X 48"	16	3	48
DETOUR	M4-9b(R) 30" X 24"	5	4	20	ONE LANE ROAD 1000 FT	W20-4B 48" X 48"	16	2	32
DETOUR	M4-9b(X) 30" X 24"	5	3	15		W20-7a 48" X 48"	16	2	32
DETOUR	M4-10L 48" X 18"	6	1	6	BE PREPARED TO STOP	W20-7b 48" X 48"	16	2	32
DETOUR	M4-10R 48" X 18"	6	1	6	DOWN DOWN	W99-2 48" X 48"	16	4	64
TRAFFIC FINES DOUBLED IN WORK AREA	R(NJ)5-17 (S 48" X 30"	5) 10	2	20	IF AND	WHERE DIREC	CTED	46 :	SF
SIDEWALK CLOSED	R9-9 24" X 12"	2	3	6		REQUIRED AR NSTRUCTION S		1000) SF
SIDEWALK CLOSED AHEAD CROSS HERE	R9-11a (L) 24" X 18"	3	7	21					
SIDEWALK CLOSED AHEAD CROSS HERE	R9-11a (R) 24" X 18"	3	5	15					
ROAD CLOSED	R11-2 48" X 30"	10	1	10					
ROAD CLOSED TO THRU TRAFFIC	R11-4 60" X 30"	12.5	2	25					
(\$)	W1-4aL 48" X 48"	16	2	32					
***************************************	W1-4aR 48" X 48"	16	2	32					
	W1-6 48" X 24"	8	6	48					
ROAD NARROWS	W5-1 (S) 48" X 48"	16	4	64					

RECO	RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS														
REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	TAPE L –	IINIMUN ER LEN FOR L WIDTHS 11'	IGTH LANE	MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	MAXIMUM DEVICE (D) SPACING ALONG TANGENTS IN FEET									
25	10.5:1	105	115	125	25	50									
30	15:1	150	165	180	30	60									
35	20.5:1	205	225	245	35	70									
40	27:1	270	300	325	40	80									
45	45:1	450	495	540	45	90									
50	50:1	500	550	600	50	100									
55	55:1	550	605	660	55	110									
60	60:1	600	660	720	60	120									
65	65:1	650	715	780	65	130									

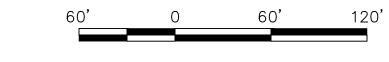
NOTE: THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.

REGULATORY APPROACH SPEED OF	RECOMMENDED SIGHT DISTANCE TO BEGINNING OF CHANNELIZING TAPERS											
TRAFFIC	DESI	MINIMUM										
MILES/HOUR	RURAL FEET	URBAN FEET	RURAL AND URBAN FEET									
25	375	525	150									
30	450	625	200									
35	525	725	250									
40	600	825	325									
45	675	925	400									
50	750	1025	475									
55	875	1150	550									
60	1000	1275	650									
65	1050		725									

- AVOIDANCE MANEUVER IS FOR A SPEED, PATH, AND/OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
- 2. RECOMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES SHALL BE DOUBLE THE VALUES SHOWN ABOVE.
- 3. RURAL AND URBAN ROAD DESIGNATION SHALL BE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
- 4. DESIRABLE VALUES SHALL BE PROVIDED WHEREVER POSSIBLE. IF IT IS NOT FEASIBLE OR PRACTICAL TO PROVIDE DESIRABLE VALUES BECAUSE OF HORIZONTAL OR VERTICAL CURVATURE OR IF RELOCATION OF THE TAPER IS NOT POSSIBLE, THEN MINIMUM VALUES CAN BE APPLIED. WHEN MINIMUM VALUES ARE USED, SPECIAL ATTENTION SHOULD BE GIVEN TO THE USE OF SUITABLE TRAFFIC CONTROL DEVICES FOR PROVIDING ADVANCED WARNING OF THE CONDITIONS THAT ARE LIKELY TO BE ENCOUNTERED.
- 5. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.



ESCAPE RAMP DETAIL



NEW JERSEY DEPARTMENT OF TRANSPORTATION

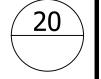
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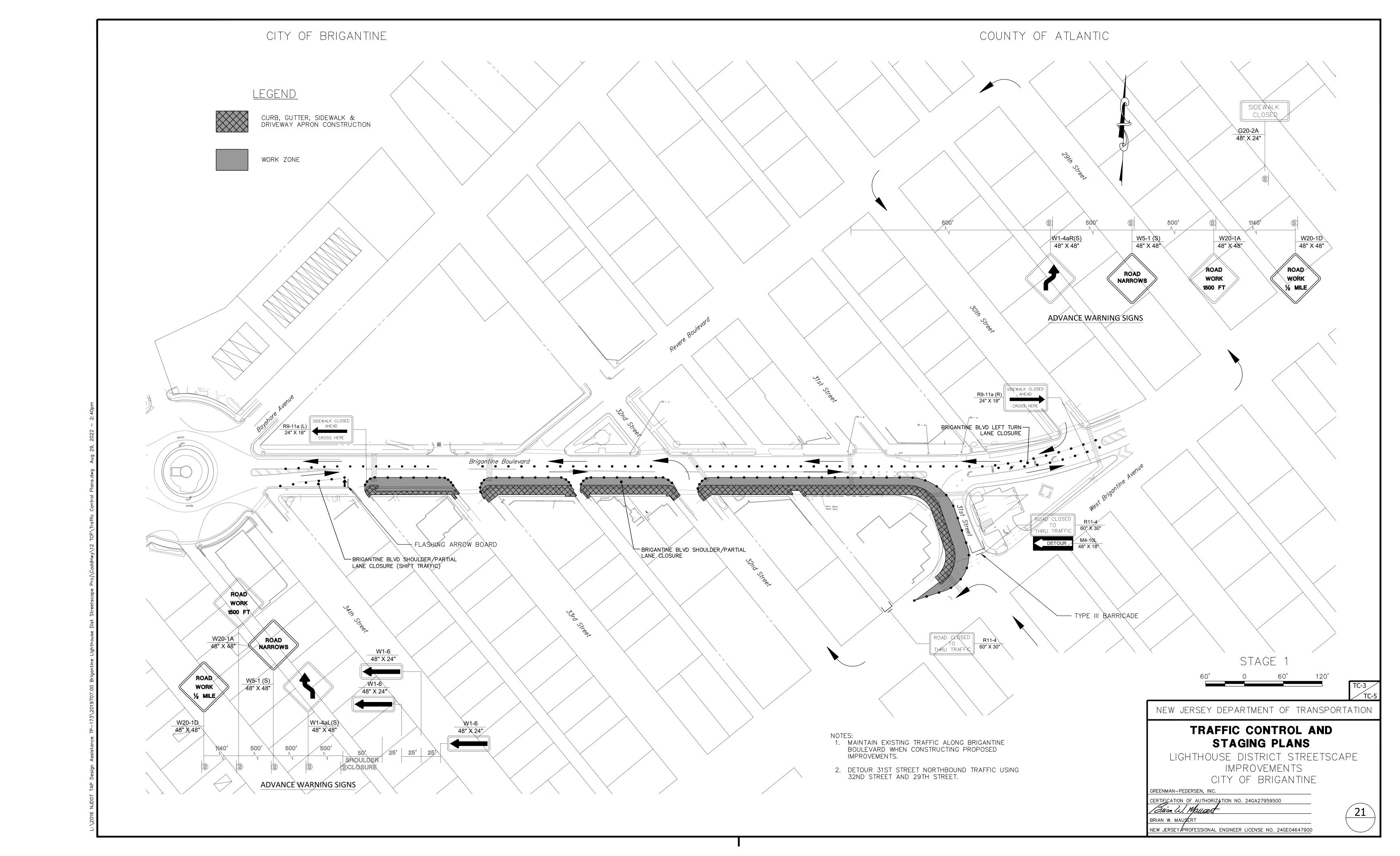
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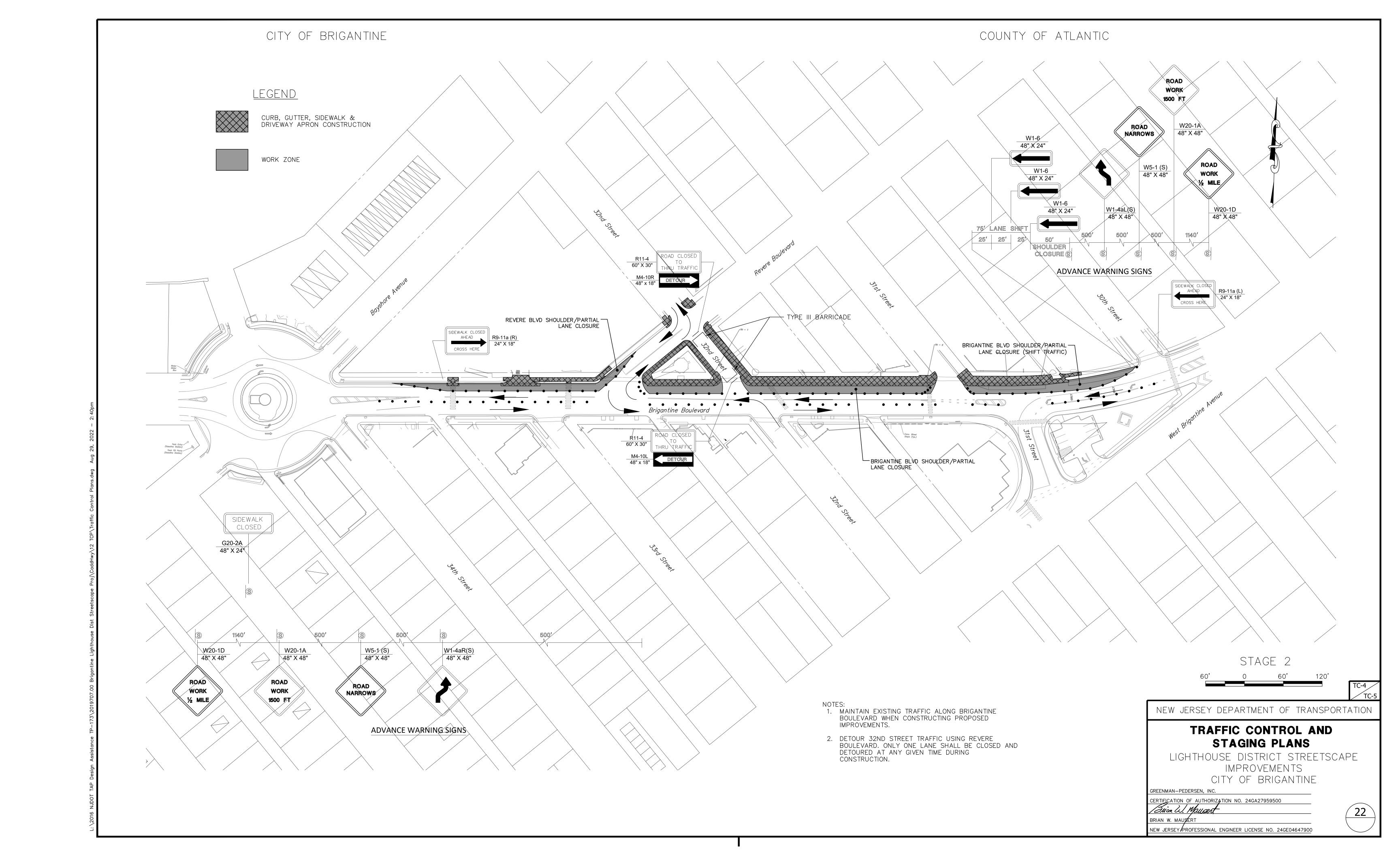
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BRIAN W. MAUSERT







TC-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

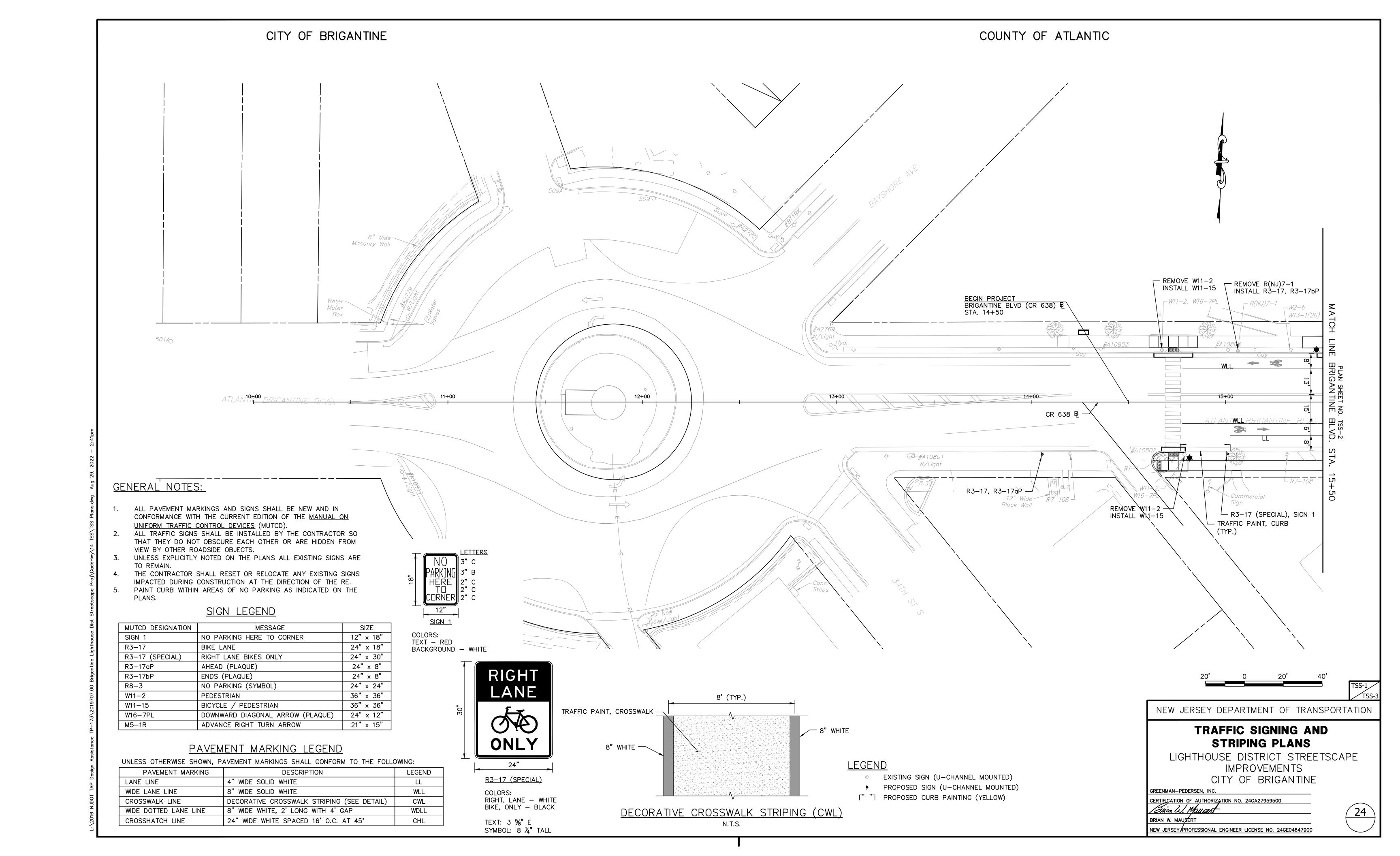
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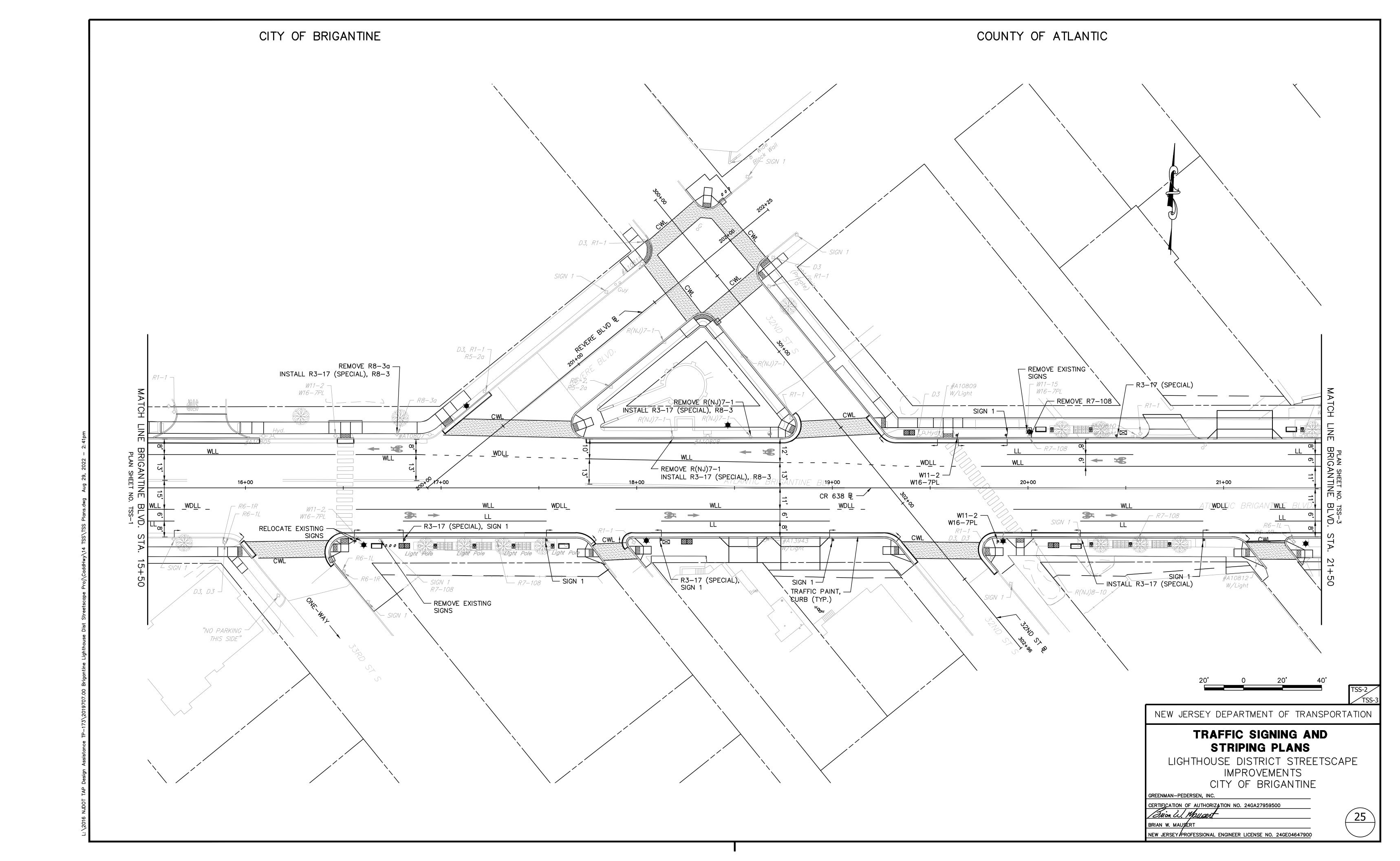
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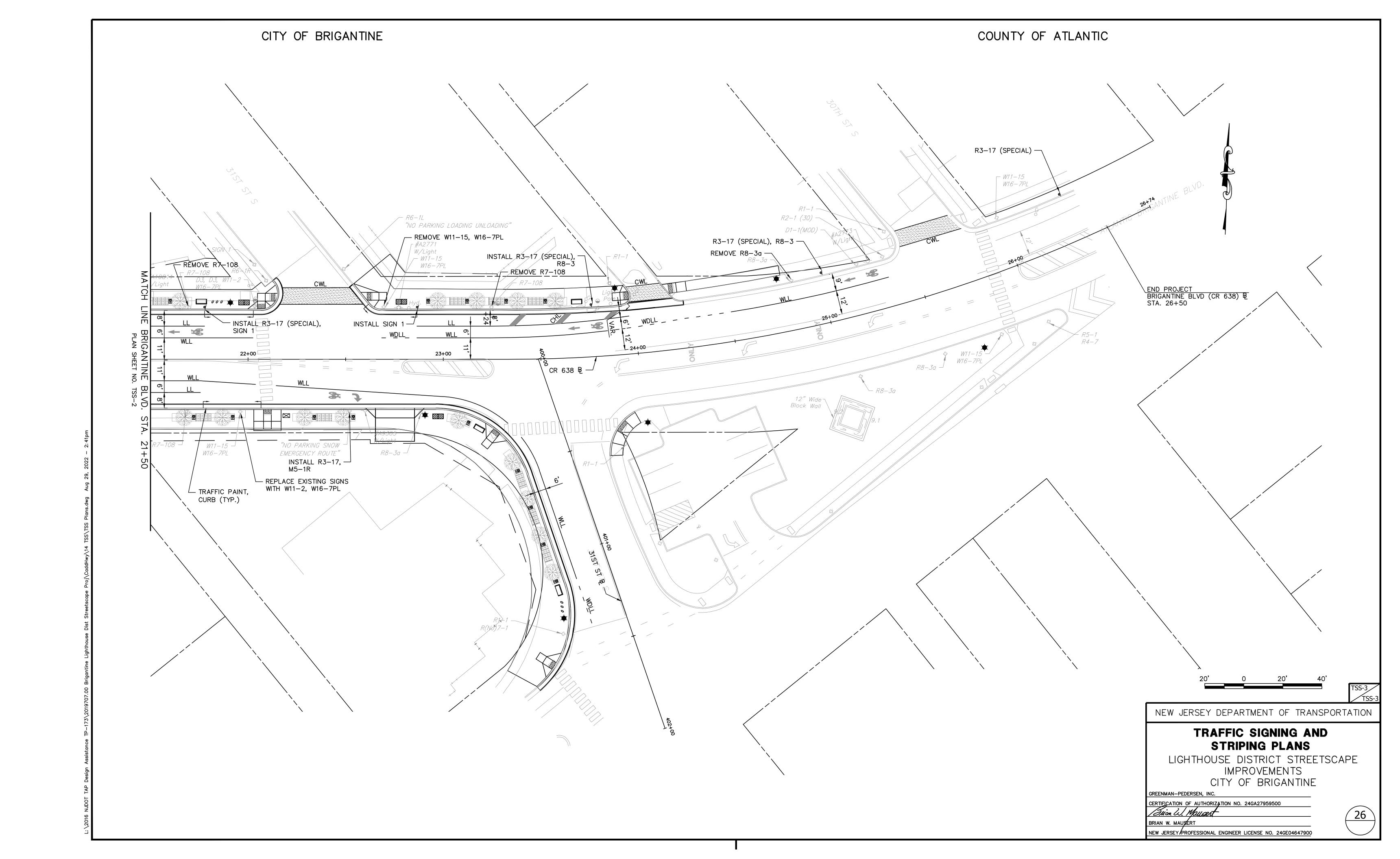
CERTIFICATION OF AUTHORIZATION NO. 24GA27959500

BDIAN W MALISEDT









ELECTRICAL GENERAL NOTES

- 1. ALL ELECTRICAL WORK TO BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) ADOPTED BE THE UNIFORM CONSTRUCTION CODE STATE OF NEW JERSEY AND ANY OTHER PARTY HAVING JURISDICTION.
- 2. ALL ELECTRICAL MATERIALS AND EQUIPMENT FOR THE PROJECT SHALL BE NEW AND APPROVED BY UNDERWRITERS LABORATORY (U.L.) OR ANY OTHER NATIONALLY RECOGNIZED TESTING AGENCY UNLESS NOTED OTHERWISE IN THE DRAWINGS.
- 3. ALL NECESSARY PERMITS, INSPECTIONS, AND LICENSES SHALL BE PROCURED BY THE CONTRACTOR. ALL PERMIT FEES AND INSPECTIONS SHALL BE PAID BY OWNER. SUBMIT TO THE OWNER DUPLICATE CERTIFICATES OF INSPECTION FROM THE APPROVED INSPECTION AGENCY.
- 4. UPON COMPLETION OF THE WORK, THE ENTIRE WIRING SYSTEM SHALL BE FREE FROM GROUNDS, SHORT CIRCUITS, OPENS, OVERLOADS AND IMPROPER VOLTAGES.
- 5. PRIOR TO FINAL ACCEPTANCE OF THE WORK, A WRITTEN STATEMENT SHALL BE SUBMITTED TO THE OWNER GUARANTEEING ALL EQUIPMENT AND SYSTEMS AGAINST DEFECTIVE MATERIAL AND WORKMANSHIP FOR ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. UPON NOTICE ALL DEFECTIVE EQUIPMENT, MATERIALS AND SYSTEMS SHALL BE PROMPTLY REPAIRED AT NO EXPENSE TO THE OWNER.
- 6. THIS SET OF DRAWINGS IS DIAGRAMMATIC IN NATURE AND INDICATES THE GENERAL ARRANGEMENT OF THE VARIOUS SYSTEMS AND APPROXIMATE LOCATIONS OF THE EQUIPMENT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THAT THERE IS ADEQUATE SPACE AT THE LOCATIONS INDICATED FOR ALL EQUIPMENT PRIOR TO INSTALLATION OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS IN THE FIELD, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. BECAUSE DIAGRAMMATIC LAYOUT AND SMALL SCALE OF DRAWINGS, NOT ALL CONDUIT, FIXTURES, DEVICES AND RELATED SPECIALTIES ARE INDICATED. PROVIDE ALL SUCH DEVICES AND SPECIALTIES REQUIRED IN SUCH CASES TO INSURE A COMPLETE AND PROPERLY OPERATING INSTALLATION IN ACCORDANCE WITH CODES AND WITHOUT EXTRA COST TO OWNER.
- 7. ELECTRICAL CONTRACTOR SHALL SECURE SHOP DRAWINGS FROM OTHER CONTRACTORS AND VERIFY EXACT ELECTRICAL CHARACTERISTICS OF EQUIPMENT TO BE WIRED PRIOR TO ROUGH—IN. IF DISCREPANCIES ARE NOTED BETWEEN THE ELECTRICAL CONTRACT DRAWINGS AND OTHER CONTRACTOR SHOP DRAWING, ELECTRICAL CONTRACTOR IS TO NOTIFY ENGINEER AT ONCE. FAILURE TO PERFORM THIS DUTY WILL NOT RELIEVE THE ELECTRICAL CONTRACTOR OF THE RESPONSIBILITY TO CORRECT WIRING DEFICIENCIES AT NO EXPENSE TO THE OWNER.
- 8. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE LOCATION OF ALL INDICATED EQUIPMENT WITH OTHER CONTRACTOR PRIOR TO INSTALLATION OF THE ASSOCIATED FEEDERS TO THE EQUIPMENT.
- 9. ALL DEVICES OR EQUIPMENT SHOWN IN SYMBOL FORM SHALL BE WIRED TO ITS RESPECTIVE PANEL.
- 10. EACH UNDERGROUND BRANCH CIRCUIT CONDUCTOR, WHERE ACCESSIBLE, SHALL BE IDENTIFIED BY VOLTAGE SYSTEM IN ACCORDANCE WITH THE NEC. COLOR—CODING, TAGGING, OR OTHER AUTHORITY HAVING JURISDICTION APPROVED MEANS SHALL BE POSTED AT EACH PANELBOARD.
- 11. ALL WIRING, CONNECTIONS AND DEVICES SHALL BE PROVIDED TO COMPLY WITH THE GROUNDING REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND THE DRAWINGS UNLESS NOTED OTHERWISE. ALL EXPOSED NON-CURRENT CARRYING ELECTRICAL EQUIPMENT METALLIC PARTS, RACEWAY SYSTEMS AND WIRING SYSTEM GROUNDING CONDUCTORS SYSTEM SHALL BE GROUNDED.
- 12. PROVIDE A SEPARATE, GREEN-COLORED, INSULATED EQUIPMENT GROUNDING CONDUCTOR WITHIN EACH FEEDER AND BRANCH CIRCUIT RACEWAY. THIS CONDUCTOR SHALL BE SEPARATE FROM THE ELECTRICAL SYSTEM NEUTRAL CONDUCTOR. TERMINATE EACH END OF THIS GROUNDING CONDUCTOR ON A U.L. LISTED LUG, BUS OR BUSHING. THE GROUNDING CONDUCTOR SIZE SHALL BE IN ACCORDANCE WITH THE NEC.
- 13. THE ELECTRICAL CONTRACTOR SHALL LABEL WITH PERMANENT MARKER ALL JUNCTION BOXES AND RECEPTACLE OUTLET BOXES WITH CIRCUIT NUMBER AND PANEL IDENTIFICATION.
- 14. ALL TRENCHING, CUTTING, RESTORATION AND PATCHING REQUIRED FOR THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 15. PANEL BOARD DIRECTORIES SHALL BE TYPED, AND UPDATED INDICATING NEW CIRCUITING AND DEVICE DESCRIPTION AS SHOWN ON DRAWINGS.
- 16. ALL COMPONENTS OF EXISTING SYSTEMS REQUIRED TO BE MODIFIED, EXTENDED OR REUSED SHALL BE INSPECTED AND RETURNED TO A FIRST-CLASS OPERATING CONDITION. COMPONENTS SHALL BE CLEANED AND REPAINTED IF NECESSARY.
- 17. THE ELECTRICAL WORK RELATING TO THE PROJECT IS SHOWN.
 OTHER EXISTING ELECTRICAL AND SYSTEMS COMPONENTS HAVE
 BEEN LEFT OFF THE DRAWING FOR CLARITY.
- 18. ALL EQUIPMENT, DEVICES AND CIRCUITS SHALL BE LABELED ACCORDING TO OWNER REQUIREMENTS.

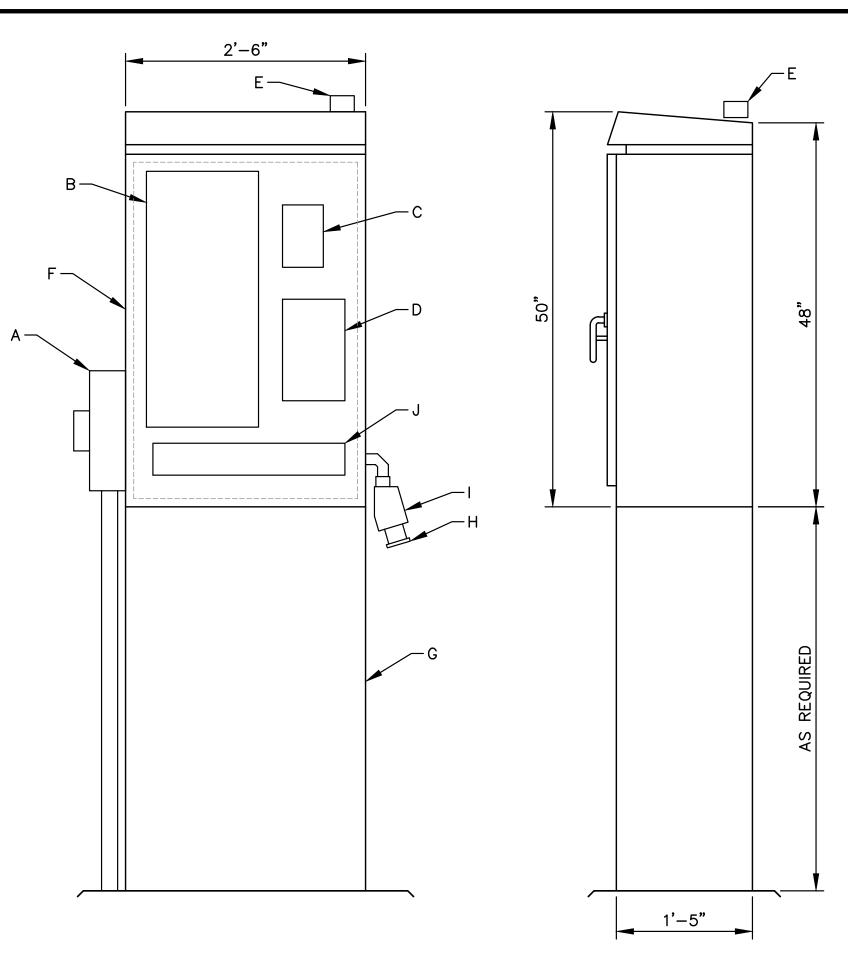
- 19. PRIOR TO CONNECTING ANY NEW LOADS TO EXISTING PANEL BOARDS, THE ELECTRICAL CONTRACTOR SHALL VERIFY THE NEW LOADS PLUS THE EXISTING LOADS DO NOT EXCEED THOSE ALLOWED BY THE NEC.
- 20. ADDITIONAL OR REPLACEMENT CIRCUIT BREAKERS FOR EXISTING PANEL BOARDS SHALL BE OF THE SAME MANUFACTURER AND TYPE, WITH AN EQUAL OR GREATER SHORT CIRCUIT RATING.
- 21. TWO OR THREE POLE CIRCUIT BREAKERS SHALL BE COMMON TRIP TYPE. SINGLE POLE BREAKERS WITH YOKED HANDLE WILL NOT BE PERMITTED.
- 22. THE ELECTRICAL CONTRACTOR SHALL NOT UTILIZE A "COMMON NEUTRAL" ON MULTIPLE BRANCH CIRCUITS. EACH SUCH CIRCUIT SHALL BE RUN WITH ITS OWN DEDICATED NEUTRAL WIRE.
- 23. ALL LOW-VOLTAGE CABLE SHALL BE RUN IN CONDUIT.
- 24. THE ELECTRICAL CONTRACTOR SHALL ASSURE THAT ANY ELECTRICAL DEVICE OR PRODUCT WHICH IS TO BE RELOCATED OR REUSED IS IN PROPER WORKING CONDITION IN ACCORDANCE WITH INSTRUCTIONS INCLUDED IN ITS LISTING OR LABELING. ANY DEVICE OR PRODUCT FOUND TO BE DEFECTIVE OR DAMAGES SHALL BE REPLACED WITH NEW.
- 25. SITE VISIT PRIOR TO BID SUBMISSION:
 - A. PRIOR TO BID SUBMISSION, THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS. BIDS AS SUBMITTED WILL BE INTERPRETED TO INCLUDE ALL COSTS AND CHARGES MADE NECESSARY BY EXISTING CONDITIONS.
 - B. ELECTRICAL CONTRACTOR SHALL VERIFY THE SIZE, LOCATION AND ELEVATION OF ALL SERVICES IN THE FIELD AFFECTED BY THIS WORK BEFORE PROCEEDING WITH CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY IN THE EVENT OF EXISTING UTILITIES VARY APPRECIABLY FROM THOSE SHOWN ON DRAWINGS.
- 26. CIRCUIT BREAKERS USED FOR SWITCHING FLUORESCENT AND HIGH INTENSITY DISCHARGE LIGHTING SHALL BE LISTED AND MARKED WITH "SWD OR "HID", AS APPROPRIATE.
- 27. WHERE CIRCUIT BREAKERS OR FUSES ARE APPLIED IN COMPLIANCE WITH THE SERIES COMBINATION RATINGS MARKED ON THE EQUIPMENT BY THE MANUFACTURER, THE EQUIPMENT ENCLOSURE(S) SHALL BE LEGIBLY MARKED IN THE FIELD TO INDICATE THE EQUIPMENT HAS BEEN APPLIED WITH A SERIES COMBINATION DEVICE RATING. THE MARKING SHALL BE READILY VISIBLE AND CONFORM TO THE NEC.
- 28. CONTRACTOR TO PROVIDE RECEPTACLES TO MATCH PLUGS FURNISHED WITH EQUIPMENT AND/OR LIGHTING FIXTURES.
- 29. ELECTRICAL CONTRACTOR SHALL FIELD BALANCE ALL ELECTRICAL PANELS.

ELECTRICAL LEGEND

- SCHEDULE 80 PVC CONDUIT RUN BELOW SLAB OR GRADE AND STUBBED UP 6" ABOVE FINISHED SLAB WITH RIGID GALVANIZED CONDUIT UNLESS NOTED OTHERWISE
- 20A, GFCI RECEPTACLE INSTALLED IN A NEMA 4X, WHILE—IN—USE WEATHERPROOF BOX MOUNTED 18" ABOVE GRADE FOR TREE LIGHTS. WIRE RECEPTACLES THROUGH LIGHTING CONTACTOR. E.C. SHALL COORDINATE ALL RECEPTACLE LOCATIONS WITH THE RE PRIOR TO ROUGH—IN
- LIGHTING LOAD CENTER
- A AMP
- ABV ABOVE
- A.F.F ABOVE FINISHED FLOOR
- A.F.G. ABOVE FINISHED GRADE
- C CONDUIT
- CU COPPER
- DP DISTRIBUTION PANEL
- .c. ELECTRICAL CONTRACTOR
- E EXISTING TO REMAIN
- G.C. GENERAL CONTRACTOR
- FI GROUND-FAULT INTERRUPTER
- ND GROUND
- KW KILOWATT
- M.C.B. MAIN CIRCUIT BREAKER
- MDP MAIN DISTRIBUTION PANEL
- NEW
- NTS NOT TO SCALE
- PNL PANEL
- V VOLT
- TYP TYPICAL
- UGD UNDERGROUND
- P WEATHERPROOF BOX WITH "WHILE-IN-USE" COVER

TYPICAL NOTATION (P1-01-08)

- P1 PANEL NUMBER (CIRCUIT ORIGIN)
- 01 CIRCUIT NUMBER
- 08 LIGHTING STANDARD NUMBER



METER CABINET, TYPE LIGHTING N.T.S.

- A. <u>METER SOCKET AND METER</u>: METER SOCKET SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS APPROVED BY THE UTILITY COMPANY. METER SHALL BE FURNISHED AND INSTALLED BY THE UTILITY COMPANY. METER SHALL BE SIZED FOR 120/240V SERVICE, 100A, 1—PHASE
- B. <u>LIGHTING PANELBOARD</u>: SOLID GROUNDABLE NEUTRAL PANELBOARD WITH (30) 1—POLE SPACES, 100A MCB, SINGLE PHASE 3 WIRE, 240 VAC AS MANUFACTURED BY SQUARE D, CAT. #NQ30L1C14 OR APPROVED EQUAL.
- C. <u>ELECTRONIC TIME CONTROL</u>: ASTRONOMIC 365-DAY 1-CIRCUIT ELECTRONIC CONTROL, 120 VAC, SPDT, 30A RATED CONTACTS, NEMA 1 AS MANUFACTURED BY INTERMATIC MODEL #ET90115C OR APPROVED EQUAL.
- D. <u>LIGHTING CONTACTOR</u>: ELECTRICALLY OPERATED, ELECTRICALLY HELD WITH (8) POLE, 20A, 120 VAC, NEMA 1 AS MANUFACTURED BY SQUARE D, CAT. #8903LG08V02 OR APPROVED EQUAL.
- E. PHOTOCELL: SINGLE POLE, 120V, 1800VA, UTILITY GRADE, LOCKING TYPE.
- F. <u>LOAD CENTER ENCLOSURE</u>: SINGLE DOOR WITH PADLOCK DOOR HANDLE, ALUMINUM BACK PANEL, NEMA 4X, 14 GAUGE, 304 STAINLESS STEEL AS MANUFACTURED BY APX ENCLOSURES, INC., CAT. #LS503017S0754X OR APPROVED EQUAL.
- G. <u>LOAD CENTER RISER BASE</u>: SHALL BE SUPPLIED BY THE SAME MANUFACTURE AS THE LOAD CENTER ENCLOSURE, WITHOUT TOP OR BOTTOM, AND BE OF SUFFICIENT HEIGHT SO THAT ALL LIVE PARTS ARE INSTALLED AT A MINIMUM ELEVATION OF 2-FEET ABOVE FEMA BASE FLOOD ELEVATION OF 9'-0" N.A.V.D. (1988).
- H. <u>RECEPTACLE</u>: WATERTIGHT IEC PIN AND SLEEVE RECEPTACLE, 60A, 250VAC, 3 POLE, 4 WIRE AS MANUFACTURED BY HUBBELL INC., CAT. #HBL460R12W OR APPROVED EQUAL.
- I. <u>BACK BOX</u>: METALLIC BACK BOX, 60A, 1½", ANGLED, ALUMINUM AS MANUFACTURED BY HUBBELL INC., CAT. #BB602W OR APPROVED EQUAL.
- J. WIREWAY: 4"X4"X24" NEMA 1 WITH CLOSURE PLATES

EL-1 EL-

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ELECTRICAL PLANS

LIGHTHOUSE DISTRICT STREETSCAPE IMPROVEMENTS CITY OF BRIGANTINE

GREENMAN-PEDERSEN, INC.

CERTIFICATION OF AUTHORIZATION NO. 24GA27959500

BRIAN W. MAUSERT



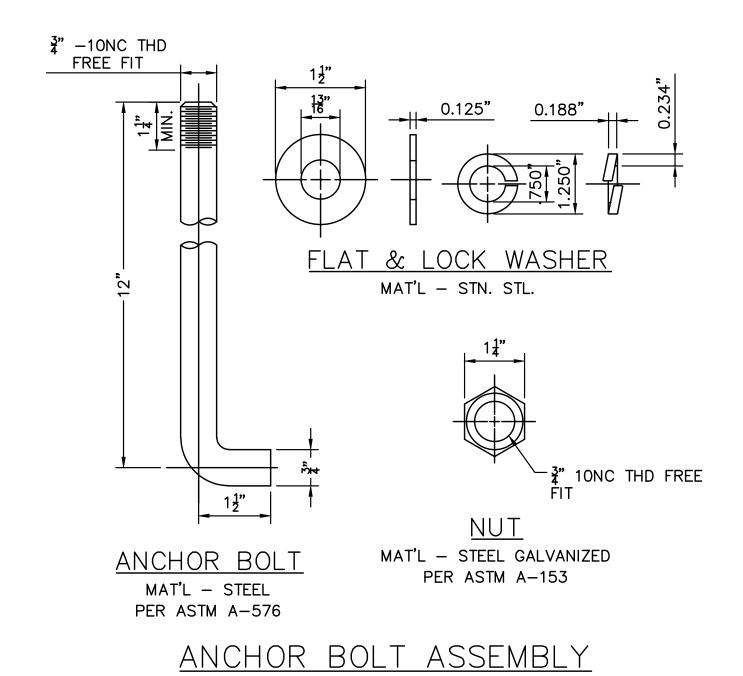
LIGHTING CONTACTOR

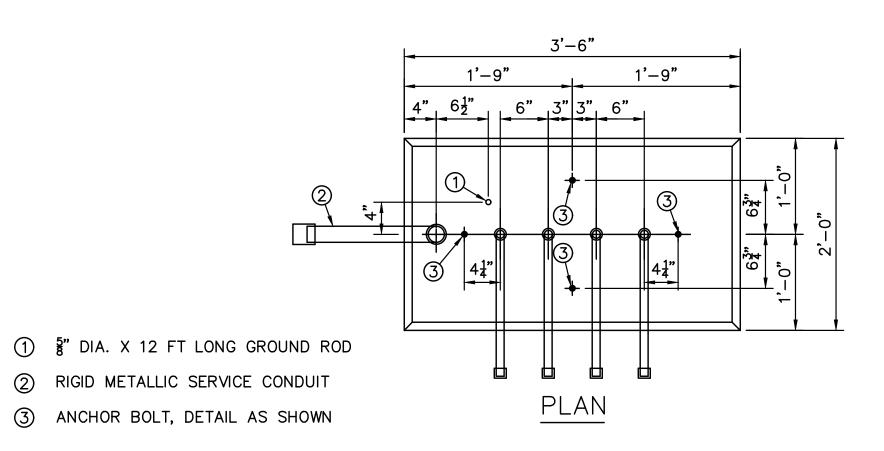
TYPICAL LIGHTING CONTACTOR/TIME CONTROL DETAIL

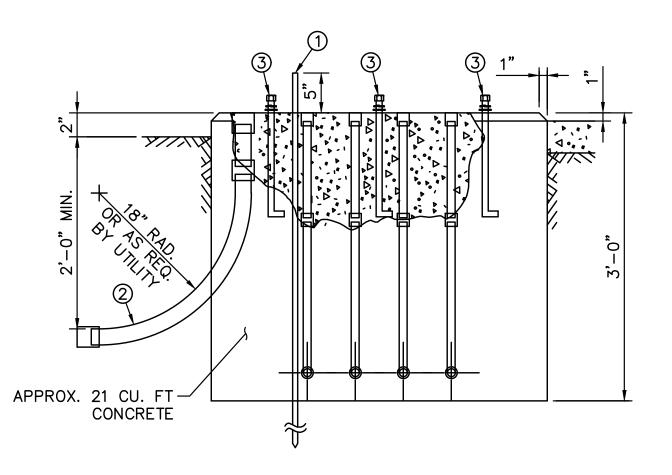
					NE	W	PA	<u> </u>	ΞL	"F	71"					
	100 AMP A.C.B. E: 240/120 VOLT, 1	Ø, 3W, SN, 22KAIC													EW OUTDOOR UTILIT	
CONDUIT WIRE KW/PHASE CIRCUIT BREAKER RW/PHASE CIRCUIT BREAKER KW/PHASE CIRCUIT BREAKER CIRCUIT															WIRE	CONDUIT
SIZE	SIZE	SERVICE TO:	A	В	AMP	Р	NO.	POLE	NO.	Р	AMP	A	В	SERVICE TO:	SIZE	SIZE
	2#10 & 1#10 GND		0.148		^20	1	1	Α	2	1	*20	0.360		TREE LIGHTING RECEPTACLES	2#10 & 1#10 GND	
1"	2#10 & 1#10 GND			0.111	^20	1	3	В	4	1	*20		0.720	TREE LIGHTING RECEPTACLES	2#10 & 1#10 GND	
1,"	3#6 & 1,#10 GND	60A/2P RĘCEPTACLE	5.000		60	2	5	Α	6	1		0.360		TREE LIGHTING RECEPTACLES	2#10 & 1#10 GND	
•	•			5.000	<u> </u>	<u> </u>	7	В	8	1	20		0.100	LIGHTING CONTACTOR	2#12 & 1#12 GND	1"
	·	SPARE			20	1	9	Α	10	1	20			SPĄRE		
					20	1	11	В	12	1	20					
							13	Α	14					·		
							15	В	16							
							17	Α	18							
							19	B	20							
			5.148	5.111			<u>TO:</u>	TAL TO	TAL			0.720	0.820			
	LIGHTING CIRCUITS	WIRED THROUGH DIGITAL TIME CL	OCK WIT	ГΗ			5.8	4 E 368 5.9 11.799								
		BREAKER SERVING TREE RECEPTA CLOCK WITH PHOTOCELL CONTROL		MIRED				111.799	J					<u>LOAD SUMMARY:</u> 11.799 KW/.240 = 49.2A x 1.	25 = 61.5A	

								NE	W	PA	$\frac{1}{1}$	EL	"F	2"					
MAINS: VOLTAGE				Ø, 3W, SN, 22k	(AIC													EW OUTDOOR UTILIT	
CONDUIT		WIR	Œ			kW/P	HASE	CIRCU	IIT BRE	EAKER	POLE	CIRCL	JIT BRI	EAKER	kW/P	HASE		WIRE	CONDUIT
SIZE		SIZ	Έ	SERVI	CE TO:	Α	В	AMP	Ρ	NO.	POLE	NO.	Р	AMP	Α	В	SERVICE TO:	SIZE	SIZE
1"	2#10	& 1 _i	#10 GND	STREET LIG	HT FIXTURES	0.074		^20	1	1	Α	2	1	*20	0.720		TREE LIGHTING RECEPTACLES	2#10 & 1#10 GND	1"
1"	2#10	& 1 _i	#10 GND	STREET LIG	HT FIXTURES		0.074	^20	1	3	В	4	1	*20		0.540	TREE LIGHTING RECEPTACLES	2#10 & 1#10 GND	1"
1,"	3#6 8	k 1,#	#10 GND	60A/2P R	ECEPTACLE	5.000		60	2	5	Α	6	1	20			SPARE		
,					•		5.000	•	—	7	В	8	1	20		0.100	LIGHTING CONTACTOR	2#12 & 1#12 GND	1"
				SP.	ARE			20	1	9	Α	10	1	20			SPĄRE		
								20	1	11	В	12	1	20					
										13	Α	14					•		
										15	В	16							
										17	Α	18							
										19	В	20							
						5.074	5.074			TO.	TAL TO	TAL			0.720	0.640			
	LIGHTII FOCELL			WIRED THROUGH	DIGITAL TIME CL	OCK WI	ГН			5.7	4 1 794 5.7 11.508								
				BREAKER SERVI CLOCK WITH PHO			MIRED				11.000	J					<u>LOAD SUMMARY:</u> 11.508 KW/.240 = 48.0A x 1.	25 = 60.0A	

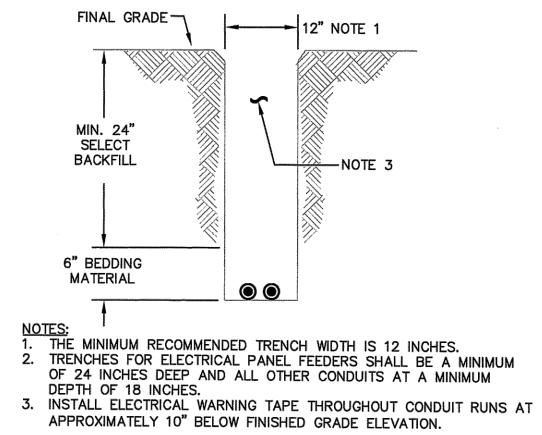
	NEW PANEL "P3"															
	MAINS: 100 AMP A.C.B. FED FROM: NEW OUTDOOR UTILITY METER FOLTAGE: 240/120 VOLT, 10, 3W, SN, 22KAIC FEEDER: 3#1 & 1#8 GND. IN 1-1/2°C.															
CONDUIT SIZE	WIRE SIZE	SERVICE TO:	kW/P	HASE B	CIRCU	IT BRE	AKER NO.	POLE	CIRCU NO.	JIT BRI	EAKER AMP	kW/P	HASE B	SERVICE TO:	WIRE SIZE	CONDUIT SIZE
1"	2#10 & 1#10 GND	STREET LIGHT FIXTURES	0.111		^20	1	1	Α	2	1		0.720		TREE LIGHTING RECEPTACLES	2#10 & 1#10 GND	1"
1"	2#10 & 1#10 GND	STREET LIGHT FIXTURES		0.074		1	3	В	4	1	*20		0.540	TREE LIGHTING RECEPTACLES	2#10 & 1#10 GND	
 	3#6 & 1#10 GND	60A/2P RECEPTACLE	5.000	5.000	60	7	5 7	A B	8	1	20	0.360	0.100	TREE LIGHTING RECEPTACLES LIGHTING CONTACTOR	2#10 & 1#10 GND 2#12 & 1#12 GND	
,	1	SPARE		0.000	20	1	9	A	10	1	20		0.100	SPARE		·
					20	1	11	В	12	1	20			•		
							13 15	A B	14 16		+					
							17	Ā	18							
							19	В	20			1.222	2 2 1 2			
PHOT	5.111 5.074 TOTAL TOTAL 1.080 0.640 ^ NEW LIGHTING CIRCUITS WIRED THROUGH DIGITAL TIME CLOCK WITH 6.191 5.714 * NEW GFCI TYPE CIRCUIT BREAKER SERVING TREE RECEPTACLES WIRED 1.080 0.640 * NEW GFCI TYPE CIRCUIT BREAKER SERVING TREE RECEPTACLES WIRED 1.080 0.640 * NEW GFCI TYPE CIRCUIT BREAKER SERVING TREE RECEPTACLES WIRED 1.080 0.640 * LOAD SUMMARY:															
		CLOCK WITH PHOTOCELL CONTROL												$11.905 \text{ KW}/.240 = 49.6A \times 1.$	25 = 62.0A	





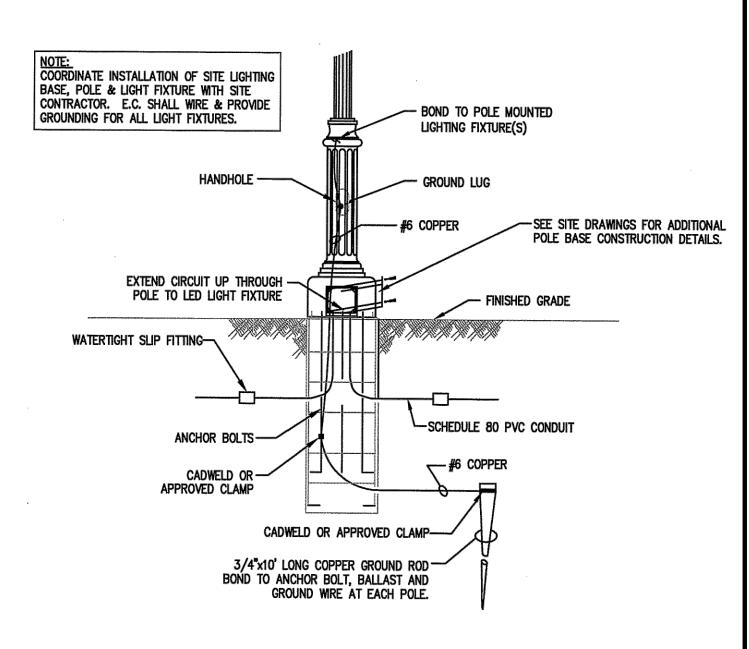


FOUNDATION, TYPE METER CABINET



TRENCH DETAIL

ELECTRICAL



POLE AND BASE GROUNDING DETAIL

NEW JERSEY DEPARTMENT OF TRANSPORTATION **ELECTRICAL PLANS**

LIGHTHOUSE DISTRICT STREETSCAPE **IMPROVEMENTS** CITY OF BRIGANTINE

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