

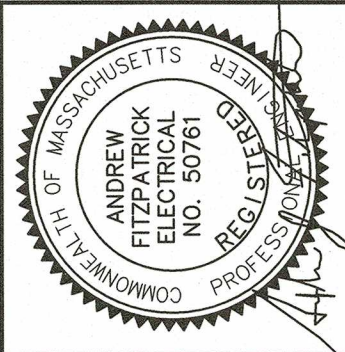
GENERAL NOTES:

1. ALL ITEMS SHOWN IN GREYSCALE INDICATES EXISTING. ALL ITEMS SHOWN IN BOLD INDICATES NEW WORK, UNLESS SPECIFICALLY INDICATED OTHERWISE.
2. ALL EQUIPMENT AND LOCATIONS ARE SHOWN DIAGMAMTICALLY AND SHALL BE COORDINATED IN THE FIELD PRIOR TO INSTALLATION.
3. UNDERGROUND CONDUIT ROUTING AND LOCATIONS SHOWN ARE APPROXIMATE.
4. SCHED. 40 CONDUIT TO BE USED IN CONCRETE ENCASED CONDUITS. SCHED. 80 CONDUITS TO BE USED SAND ENCASED CONDUITS.

KEYED NOTES:

1. ALL DUCT BANKS RUNNING ACROSS AREAS SUBJECT TO VEHICULAR TRAFFIC TO BE CONCRETE ENCASED. SEE DETAIL 2 ON E80.01.
2. EXISTING ELECTRICAL ENCLOSURE "ENC-2" TO BE REPLACED WITH A HANDHOLE. EXISTING ACTIVE CIRCUITS REMAINING AFTER NEW LIGHTING INSTALLATION TO BE MIGRATED, ACTIVE CIRCUIT ASSOCIATED CONDUITS TO BE CUT BELOWGRADE AND TRANSITIONED INTO HANDHOLE. SEE NEW LOCATION THIS SHEET.
3. EXISTING ELECTRICAL ENCLOSURE "ENC-1" TO BE REPLACED WITH A HANDHOLE. EXISTING ACTIVE CIRCUITS REMAINING AFTER NEW LIGHTING INSTALLATION TO BE MIGRATED, ACTIVE CIRCUIT ASSOCIATED CONDUITS TO BE CUT BELOWGRADE AND TRANSITIONED INTO HANDHOLE. SEE NEW LOCATION THIS SHEET.
4. LOCATION FOR "ENC-1" REPLACEMENT. SEE RISERS FOR MORE DETAILS.
5. LOCATION FOR "ENC-2" REPLACEMENT. SEE RISERS FOR MORE DETAILS.
6. EXISTING ENCLOSURE HOUSES UTILITY SERVICE CABLING, UTILITY CABLING AND SPLICE TO BE PLACED IN TRAFFIC RATED HANDHOLE LOCATED IN PLACE OF ENCLOSURE. COORDINATE ALL WORK WITH LOCAL ELECTRICAL UTILITY.
7. POLE MOUNTED LIGHT FIXTURE FOR FLAG ILLUMINATION. PROVIDE UNDERGROUND POWER SUPPLY. SEE LIGHTING FIXTURE SCHEDULE ON E60.01 FOR MORE INFORMATION.
8. PROVIDE HANDHOLE AT BASE OF EVERY LIGHTING FIXTURE FOR EASE OF PULLING AND INSTALLATION.
9. PROVIDE NEW SERVICE FOR NEW ELECTRICAL ENCLOSURE. COORDINATE ALL WORK WITH LOCAL ELECTRICAL UTILITY. ALL LOCATIONS AND ROUTING SHALL BE FIELD COORDINATED.
10. CONTRACTOR SHALL RELOCATE ALL EXISTING ELECTRICAL CONDUITS FROM WITHIN EXISTING ENCLOSURE "ENC-01". ALL EXISTING CONDUITS SHALL BE ROUTED OUTSIDE OF THE AREA FOR THE ELECTRICAL HANDHOLE. CONTRACTOR SHALL COORDINATE THE HANDHOLE REQUIREMENTS WITH THE UTILITY COMPANY. HANDHOLE CAN BE PLACED IN SAME LOCATION AS "ENC-1" ENCLOSURE. CONTRACTOR SHALL DEMO THE EXISTING ENCLOSURE AND BASE AROUND THE UTILITY COMPANY WIRES WITHOUT DAMAGING THEM. EXCAVATE HOLE AND INSTALL HANDHOLE OVER THE EXISTING UTILITY WIRES.
11. PROVIDE DUCTBANK FOR EXISTING CIRCUITS TO BE INTERCEPTED FROM OLD ELECTRICAL ENCLOSURE. CONTRACTOR TO FIELD COORDINATE FINAL SIZE AND QUANTITY OF CONDUITS. COORDINATE NUMBER OF CONDUITS WITH ENGINEER.
12. PROVIDE POLE BASE WITH ADDITIONAL 3'-0" DEPTH. POLE SHALL BE BURIED SO AS TO ALLOW 3'-0" TO BE ABOVE GRADE TO PROVIDE TRAFFIC PROTECTION TO POLE.
13. ALL CONDUIT RUNS TO CROSS SOMERSET AVENUE SHALL MATCH DUCTBANK "K" CALLOUT UNLESS NOTED OTHERWISE.
14. ALL CONDUIT RUNS TO CROSS SOMERSET AVENUE SHALL MATCH DUCTBANK "M" CALLOUT UNLESS NOTED OTHERWISE.
15. LIGHT POLE AND PULLBOX THIS LOCATION SHALL BE FIELD COORDINATED AROUND EXISTING UTILITIES.

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NO.	DESCRIPTION	DATE	CHECKED BY: AJF
2	CHANGE REQUEST "GR-04" LIGHTING	11/09/2020	
1	CFO #10 WOODSIDE ALIGNMENT CHANGE	9/24/2020	
0	CONFORMED SET	12/13/2019	
REV			

DESIGNED BY: NHB
DRAWN BY: NHB
E80.02WG

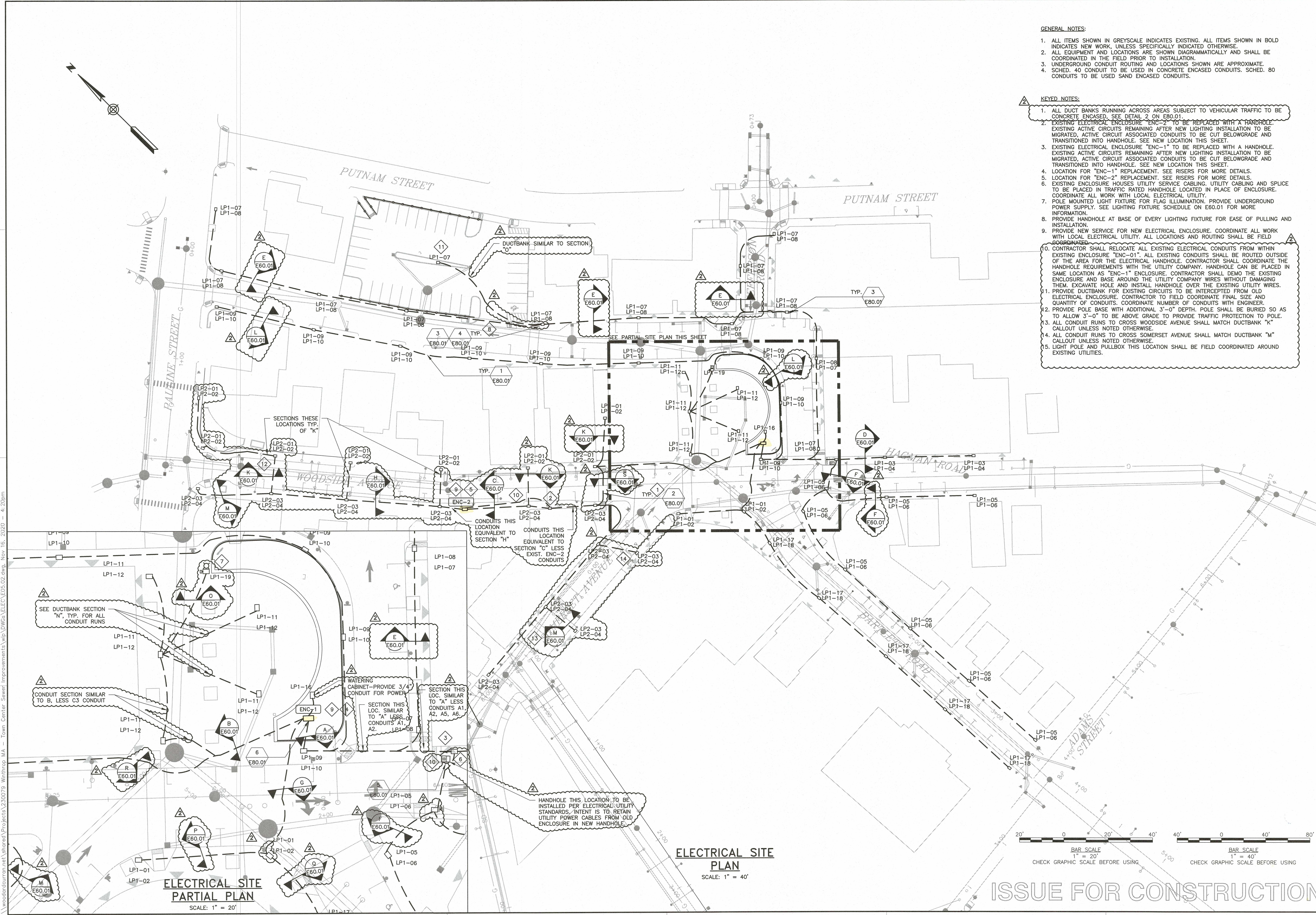
ELECTRICAL SITE PLAN

TOWN OF WINTHROP
1 METCALF SQUARE
WINTHROP, MASSACHUSETTS

CENTRE BUSINESS DISTRICT
INFRASTRUCTURE IMPROVEMENTS

JOB NO.: 230079
DATE: JULY 2019
SCALE: AS NOTED
SHEET: 57 OF 59

E05.02



ELECTRICAL SITE
PARTIAL PLAN
SCALE: 1" = 20'

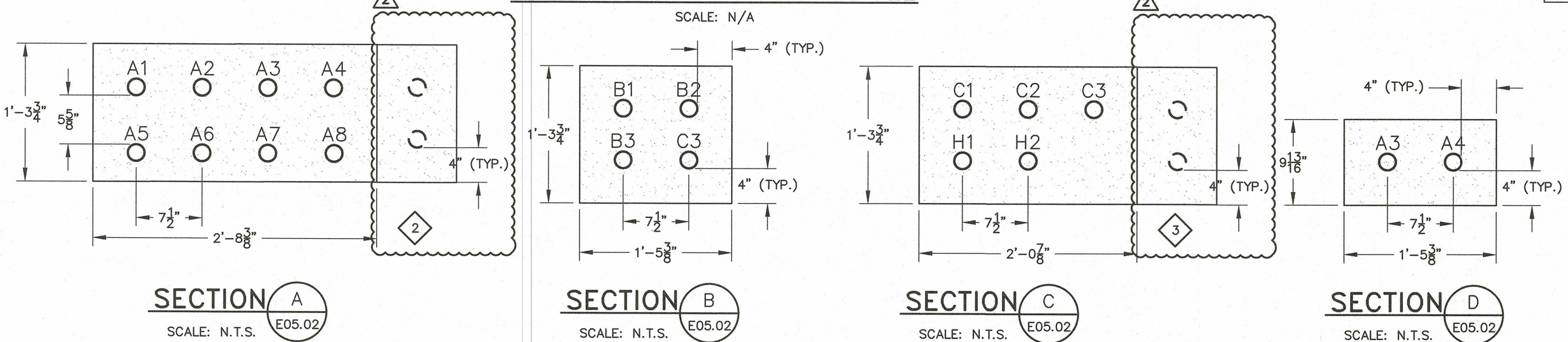
ELECTRICAL SITE
PLAN
SCALE: 1" = 40'

ISSUE FOR CONSTRUCTION

CONDUIT & WIRE SCHEDULE

CONDUIT	USE	D.B. TYPE	SIZE	WIRE SIZE	FROM	TO	DESCRIPTION	NOTES
A1	POWER	1	1 1/2"	(3)#4	LIGHTING PANEL LP1	STRING #5 FIXTURES	LP1 CKT 9	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
A2	POWER	1	1 1/2"	(3)#2	LIGHTING PANEL LP1	STRING #5 RECEPTACLES	LP1 CKT 10	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
A3	POWER	1	1 1/2"	(3)#10	LIGHTING PANEL LP1	STRING #2 FIXTURES	LP1 CKT 3	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
A4	POWER	1	1 1/2"	(3)#8	LIGHTING PANEL LP1	STRING #2 RECEPTACLES	LP1 CKT 4	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
A5	POWER	1	1 1/2"	(3)#2	LIGHTING PANEL LP1	STRING #4 FIXTURES	LP1 CKT 7	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
A6	POWER	1	1 1/2"	(3)#2	LIGHTING PANEL LP1	STRING #4 RECEPTACLES	LP1 CKT 8	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
A7	POWER	1	1 1/2"	(3)#6	LIGHTING PANEL LP1	STRING #3 FIXTURES	LP1 CKT 5	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
A8	POWER	1	1 1/2"	(3)#4	LIGHTING PANEL LP1	STRING #3 RECEPTACLES	LP1 CKT 6	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
B1	POWER	1	1 1/2"	(3)#10	LIGHTING PANEL LP1	STRING #6 FIXTURES	LP1 CKT 11	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
B2	POWER	1	1 1/2"	(3)#10	LIGHTING PANEL LP1	STRING #6 RECEPTACLES	LP1 CKT 12	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
B3	POWER	1	1 1/2"	(3)#12	LIGHTING PANEL LP1	FLAG POLE LIGHTING FIXTURE	LP1 CKT 19	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
C1	POWER	1	1 1/2"	(3)#8	LIGHTING PANEL LP2	STRING #7 FIXTURES	LP2 CKT 1	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
C2	POWER	1	1 1/2"	(3)#6	LIGHTING PANEL LP2	STRING #7 RECEPTACLES	LP2 CKT 2	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
C3	CONTROLS	1	1"	(2)#12	LIGHTING PANEL LP2	LIGHTING PANEL LP1 PHOTOCELL	TIE IN FOR PHOTOCELL BETWEEN ENCLOSURES	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
G1	POWER	1	1 1/2"	(3)#8	LIGHTING PANEL LP1	STRING #1 FIXTURES	LP1 CKT 1	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
G2	POWER	1	1 1/2"	(3)#8	LIGHTING PANEL LP1	STRING #1 RECEPTACLES	LP1 CKT 2	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
G3	POWER	1	1 1/2"	(3)#6	LIGHTING PANEL LP1	STRING #9 FIXTURES	LP1 CKT 17	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
G4	POWER	1	1 1/2"	(3)#4	LIGHTING PANEL LP1	STRING #9 RECEPTACLES	LP1 CKT 18	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
H1	POWER	1	1 1/2"	(3)#4	LIGHTING PANEL LP2	STRING #8 FIXTURES	LP2 CKT 3	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB
H2	POWER	1	1 1/2"	(3)#2	LIGHTING PANEL LP2	STRING #8 RECEPTACLES	LP2 CKT 4	TYPE EXCEPTION: ROADWAY/ DRIVEWAY CROSSINGS SHALL BE TYPE 2 DB

ELECTRICAL DUCT SCHEDULE



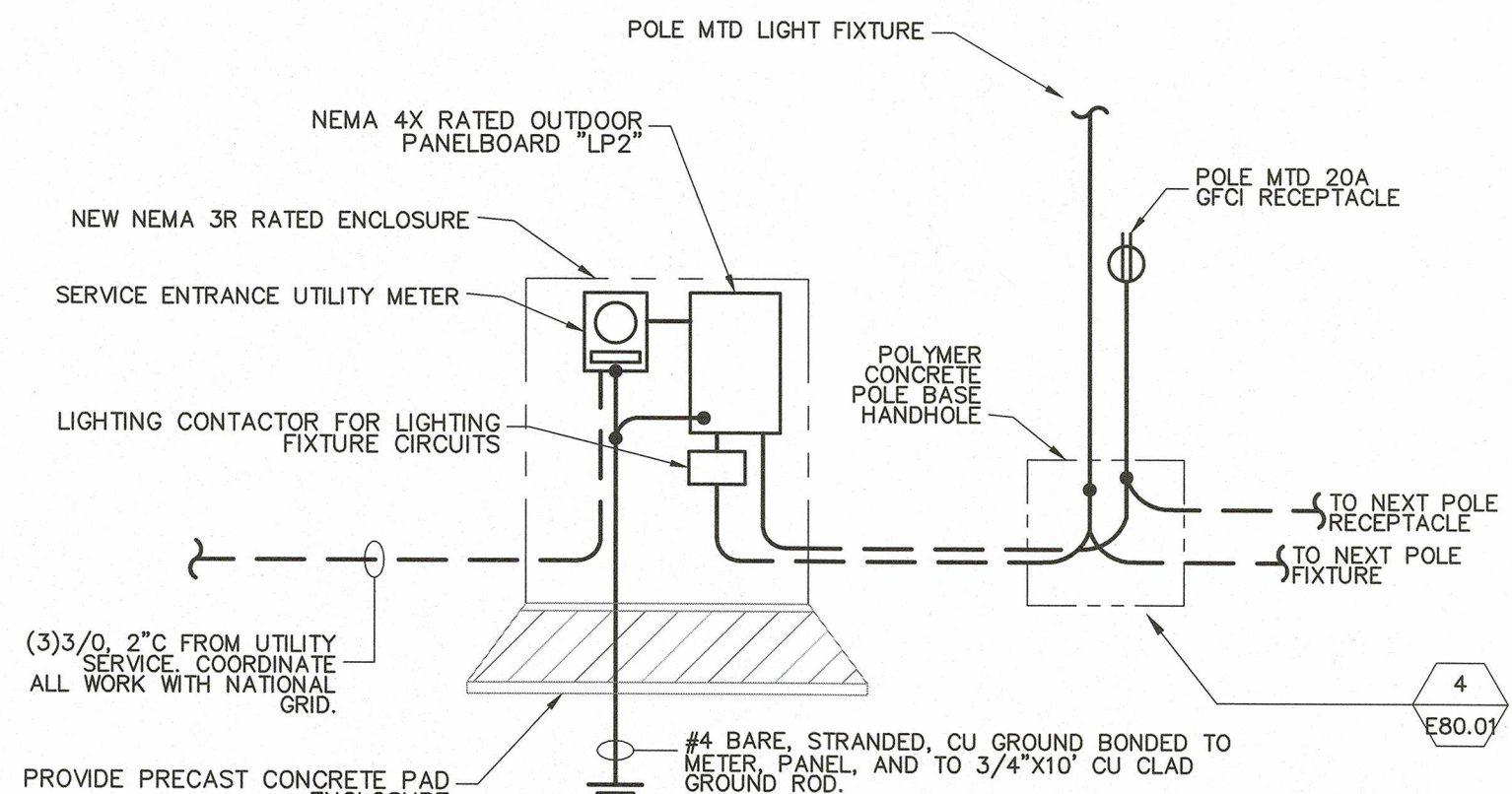
PANEL "LP1" SCHEDULE

SCALE: N.T.S.

DIRECTORY	BRKR	POLE	CKT #	KVA	KVA LOADS		KVA	CKT #	POLE	BRKR	DIRECTORY
					A	B					
LIGHTING STRING #7 FIXTURES	20	1	1	0.56	2.00		1.44	2	1	20	LIGHTING STRING #7 RECEPTS
LIGHTING STRING #8 FIXTURES	20	1	3	0.63		2.25	1.62	4	1	20	LIGHTING STRING #8 RECEPTS
UNLABELLED	20	1	5	0.00	0.00		0.00	6	1	20	OLD CVS
UNLABELLED	20	1	7	0.00		0.00	0.00	8	1	20	GAGN INS
UNLABELLED	20	1	9	0.00	0.00		0.00	10	1	20	WALKWAY
BK CAFÉ	20	1	11	0.00		0.00	0.00	12	1	30	XMAS CNTR
UNLABELLED	20	1	13	0.00	0.00		0.00	14	1	20	XMAS CNTR
XMAS LTS	20	1	15	0.00		0.00	0.00	16	1	30	XMAS DEPT
SPARE	20	1	17	0.00	0.00		0.00	18	1	20	UNLABELLED
SPARE	20	1	19	0.00		0.00	0.00	20	1	20	PHOTOCELL
SPARE	20	1	21	0.00	0.18		0.18	22	1	20	LIGHTING CONTACTOR
SPARE	20	1	23	0.00		0.00	0.00	24	1	20	
SPARE	20	1	25	0.00	0.00		0.00	26	1	20	SPARE
SPARE	20	1	27	0.00		0.00	0.00	28	1	20	SPARE
SPARE	20	1	29	0.00	0.00		0.00	30	1	20	SPARE
SPARE	20	1	31	0.00		0.00	0.00	32	1	20	SPARE
SPARE	20	1	33	0.00	0.00		0.00	34	1	20	SPARE
SPARE	20	1	35	0.00		0.00	0.00	36	1	20	SPARE
SPARE	20	1	37	0.00	0.00		0.00	38	1	20	SPARE
SPARE	20	1	39	0.00		0.00	0.00	40			
SPARE	20	1	41	0.00	0.00		0.00	42	2	20	SPD
SUBTOTAL					2.18	2.25	SUBTOTAL				
VOLTAGE:	120/240	TOTAL KVA			4.43		PANEL NAME:			LP2	
MAIN BREAKER:	200	TOTAL AMPS			18		LOCATION:			WOODSIDE	
BUSES:	225							MOUNTING:			SURFACE
PH & WIRES:	1PH 3W							AIC RATING:			22 KAIC
NOTES: FURNISH W/ INTEGRAL SURGE PROTECTIVE DEVICE											

PANEL "LP2" SCHEDULE

SCALE: N.T.S.

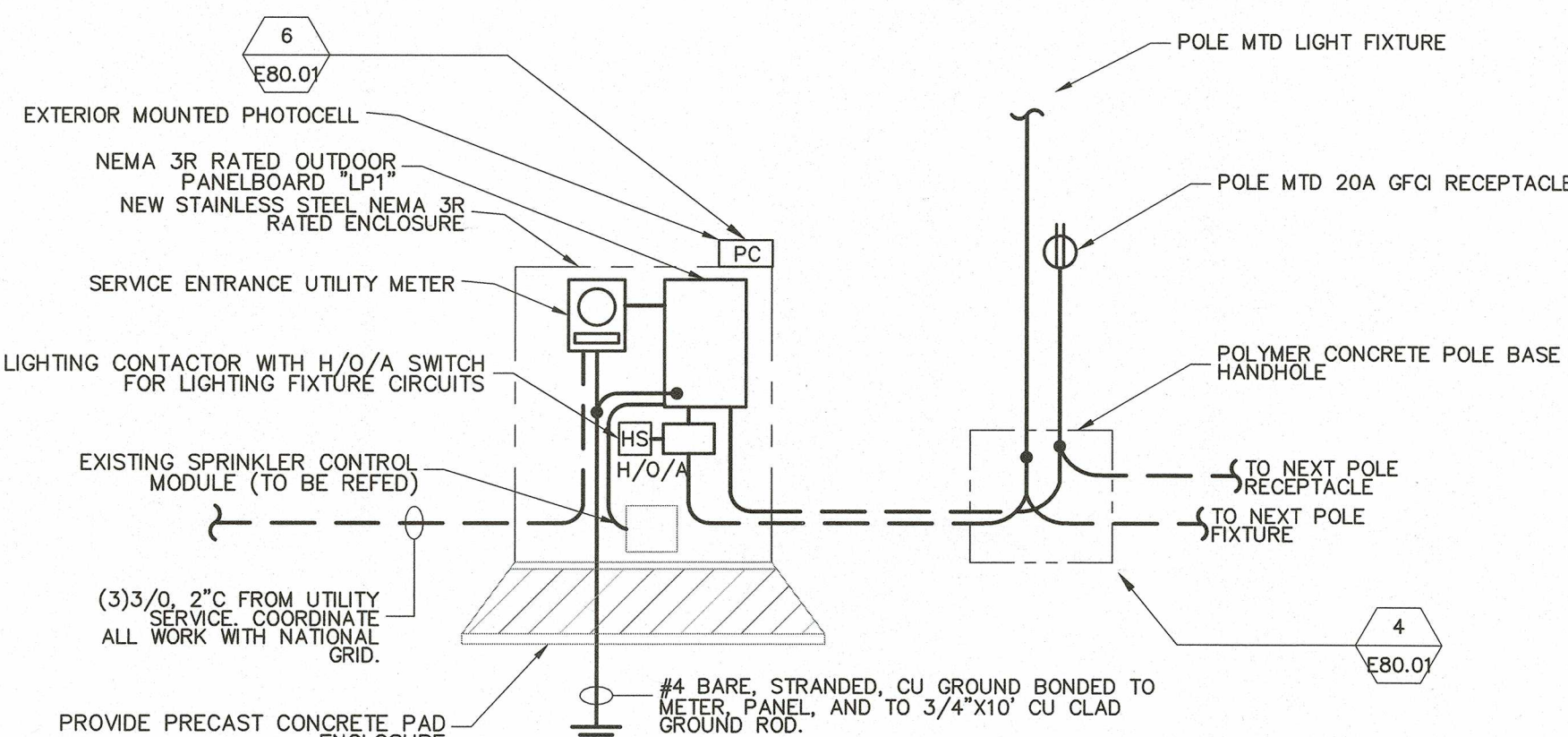
ENCLOSURE "ENC-2" RISER
DIAGRAM

SCALE: N.T.S.

ENCLOSURE "ENC-1" RISER

DIAGRAM

SCALE: N.T.S.



LIGHTING FIXTURE SCHEDULE							
ALL FIXTURES SHALL BE FURNISHED COMPLETE WITH ALL HARDWARE, LAMPS, HANGERS, FITTINGS, ETC., FOR A COMPLETE AND PROPER INSTALLATION.							
TYPE	MANUFACTURER	CATALOG NUMBER	LAMP TYPE	LAMP WATT	LAMP NO.	VOLTAGE	MTG.
4" LED ENCLOSED AND GASKETED FIXTURE	EAGLE MOUNTAIN	DM3K-IHNR	LED	5.5	LED	120/277	SURFACE
MOUNT FIXTURE TO TOP OF POLE. PROVIDE WITH PS-10-120/277 IN GROUND POWER SUPPLY ADJACENT TO HANDHOLE AT BASE OF POLE. SEE STRUCTURAL DRAWINGS FOR FURTHER POLE DETAILS.							

NOTES:

- PANEL SCHEDULE IS SHOWN FOR REFERENCE ONLY. COORDINATE FINAL CIRCUITING UPON CIRCUIT VERIFICATION ON SITE.
- ALL DIMENSIONS AND CONDUIT CONFIGURATIONS WITHIN DUCT BANKS SHOWN ARE APPROXIMATE AND SHALL BE FIELD COORDINATED AND VERIFIED.
- CIRCUITS SHOWN IN GRAYSCALE ON PANEL SCHEDULES REPRESENT EXISTING CIRCUITS TO BE MIGRATED AND RECONNECTED. CONTRACTOR TO FIELD VERIFY EXISTING CIRCUIT FUNCTIONS. WHERE CIRCUITS FEED FIXTURES OR RECEPTACLES TO BE REPLACED, RECONNECTION IS NOT REQUIRED AND ASSOCIATED BREAKERS SHALL BE PROVIDED AND LABELED SPARE.
- CONDUITS SHOWN ON SCHEDULE ONLY ACCOUNT FOR NEW TO BE INSTALLED. CONDUIT TO INTERCEPT ANY EXISTING CIRCUITS THAT NEED TO REMAIN POWERED HAVE NOT BEEN CAPTURED. CONTRACTOR TO FIELD VERIFY ADDITIONAL CONDUIT NEEDS.
- ALL CIRCUITS IN GRAY ARE EXISTING CIRCUITS. CONTRACTOR TO FIELD VERIFY EXISTING ACTIVE CIRCUITS NOT ASSOCIATED WITH LIGHTING TO BE DEMOLISHED. EXISTING ACTIVE CIRCUITS NOT ASSOCIATED WITH LIGHTING (TO BE DEMOLISHED) SHALL BE SPICED AND EXTENDED TO NEW PANEL.

NOTES:

- FLAG POLE LIGHTING FIXTURE CIRCUIT SHALL BE EXEMPT FROM LIGHTING CONTROL PHOTOCELL. INTENT IS FOR FLAG TO REMAIN ILLUMINATED 24 HOURS / DAY.
- PROVIDE CONDUITS AS NEEDED BASED UPON KEYED NOTES 3 AND 10 ON E05.02.
- PROVIDE CONDUITS AS NEEDED BASED UPON KEYED NOTES 2 AND 10 ON E05.02.

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ELECTRICAL SCHEDULES AND
SECTIONS

TOWN OF WINTHROP
1 METCAL SQUARE
WINTHROP, MASSACHUSETTS

CENTRE BUSINESS DISTRICT
INFRASTRUCTURE IMPROVEMENTS

JOB NO.: 230079
DATE: JULY 2019
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E60.01

ISSUE FOR CONSTRUCTION