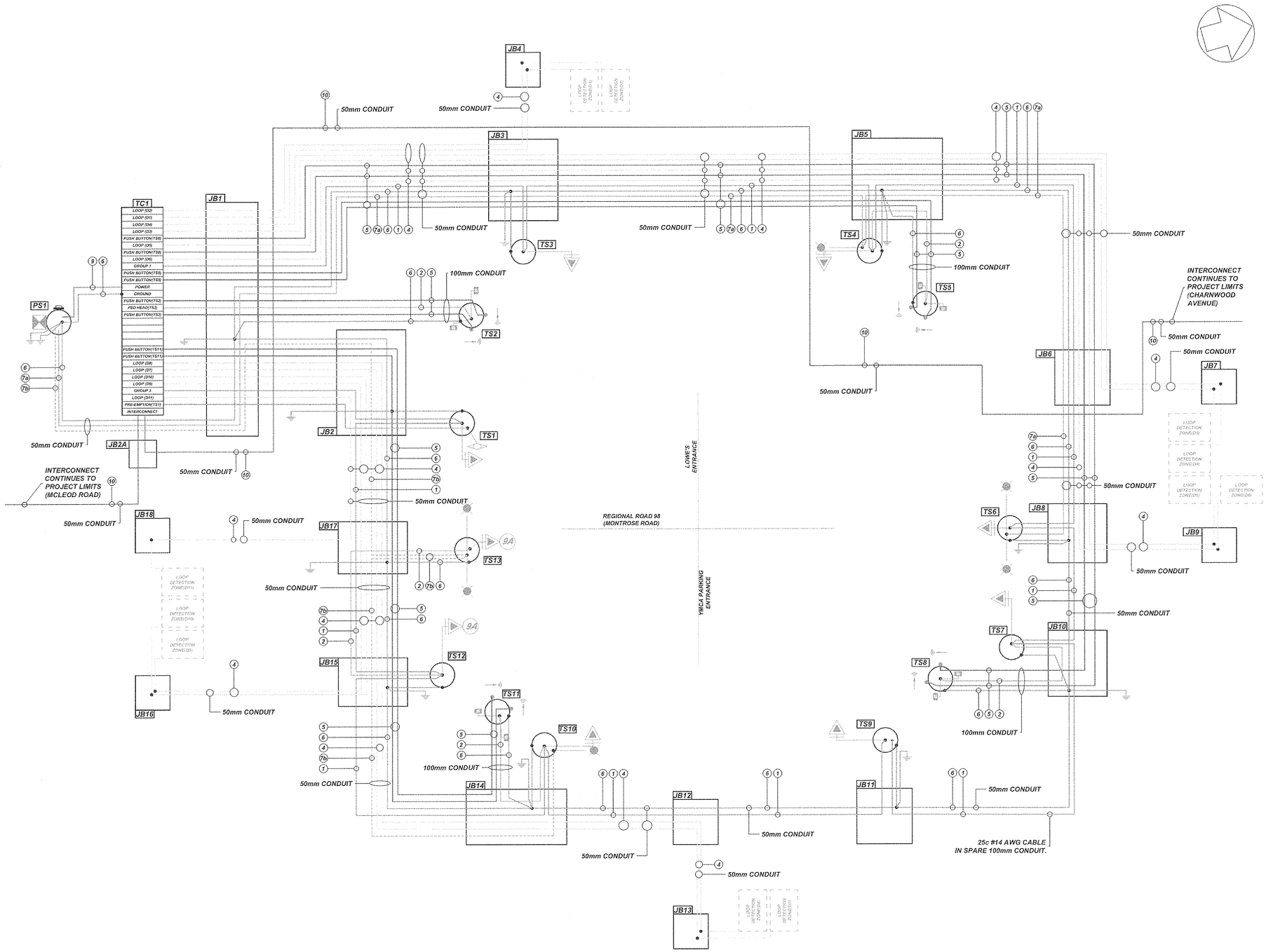


LEGEND

- (1) TRAFFIC SIGNAL CABLE – 7Sc #14 AWG.
- (2) TRAFFIC SIGNAL CABLE – 7c #14 AWG.
- (3) TRAFFIC SIGNAL CABLE – 4c #14 AWG.
- (4) LOOP CABLE – 2c – (BLACK/WHITE) GENERAL CABLE OR EQUIVALENT. – SHIELDED COMMUNICATION AND CONTROL CABLE, 1 TWISTED PAIR, BELDFOIL(R) SHIELD, 600w RATING
- (5) PUSH BUTTON CABLE – 2c – (BLACK/RED) GENERAL CABLE OR EQUIVALENT. – SHIELDED COMMUNICATION AND CONTROL CABLE, 1 TWISTED PAIR, BELDFOIL(R) SHIELD, 600w RATING
- (6) INSULATED BOND WIRE – 1c – #6 AWG. (GREEN) CU RWU-90 XLPE
- (7a) ROADWAY LIGHTING WIRE (UNDERGROUND) – 2c – #6 AWG. (BLACK/WHITE) CU RWU-90 XLPE
- (7b) ROADWAY LIGHTING WIRE (UNDERGROUND) – 2c – #6 AWG. (RED/WHITE) CU RWU-90 XLPE
- (8) RECEPTACLE WIRE – 2c – #4 AWG. (BLACK/WHITE) CU RWU-90 XLPE
- (9) ROADWAY LIGHTING WIRE (RISER) – #12/2 (BLACK & WHITE) CU NMWU-90
- (10) TRAFFIC CONTROLLER POWER – 2c – #8 (BLACK/WHITE) CU RWU-90 XLPE & 1c – #6 (GREEN) CU RWU-90 XLPE
- (11) COMMUNICATIONS (INTERCONNECT) – FIBRE OPTIC & 1c – #12 (WHITE) TRACER WIRE
- (12) VEHICLE PRE-EMPTION DETECTOR – COAXIAL
- (13) 2M59 CSA 12AWG (TRACER CABLE)
- (14) RADAR DETECTOR CABLE
- (15) CAT 5 RADIO COMMUNICATION ANTENNA CABLE

- SUPPLY A – 120/240v
- GROUND ROD
- CONNECTION POINT
- LUMINAIRE
- TRAFFIC SIGNAL HEAD
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN SIGNAL HEAD
- VEHICLE DETECTION LOOP
- HYDRO METER
- VEHICLE PRE-EMPTION DETECTOR

GENERAL NOTES

A. ALL CABLES TO BE PLACED IN 1-100mm RIGID PVC UNLESS OTHERWISE SPECIFIED.

B. ALL TRAFFIC SIGNAL HEAD RISER CABLE SHALL BE AS PER THE FOLLOWING:
- 3 SECTION HEADS – (3) 4 CONDUCTOR #14 AWG. TRAFFIC SIGNAL CABLE (SUPPLIED BY REGION)
- 4 SECTION HEADS – (2) 7 CONDUCTOR #14 AWG. TRAFFIC SIGNAL CABLE (SUPPLIED BY REGION)

C. ALL ROADWAY LIGHTING RISER WIRE SHALL BE (9) #12/2 CU NMWU-90.

D. ALL PEDESTRIAN SIGNAL RISER CABLE TO BE (3) 4 CONDUCTOR #14 AWG. TRAFFIC SIGNAL CABLE (SUPPLIED BY REGION)

E. ALL END OF RUN CONDUCTOR TO BE TERMINATED WITH INSULATING MARRETT CONNECTORS, TAPED, AND BEND UPWARDS.

F. A SUFFICIENT AMOUNT OF CABLE IS TO BE SPOOLED AT CONNECTION POINTS TO MAKE ALL CONNECTIONS AND PROVIDE DRIP LOOPS.

G. THE ENDS OF EACH CABLE SHALL BE UNIQUELY IDENTIFIED WITH COLORED ELECTRICAL TAPE. REFER TO NRS 2710 FOR CABLE COLOR ID CHART.

SUPPLY CONTROL CABINET ASSEMBLY 120/240v - 1 PHASE, 3 WIRE — PP1 — NRS 2441, TYPE 3S, 60A

CIRCUIT NO.	DESCRIPTION	LOCATION	BREAKER AMPS	WATTAGE	QUANT.	CIRCUIT LOAD (W)
1	TRAFFIC SIGNALS	24hr LOAD	40	520w	1ea	520
2a	LED LUMINAIRES	INTERSECTION	15	169w	3ea	507
2b	LED LUMINAIRES	INTERSECTION	15	169w	3ea	507
				TOTAL WATTS		1534

098MCB

NO.	REVISION	DATE	INIT.
2	REQUEST FOR TENDER	2018 10 30	N.R.L
1	90% DESIGN REVIEW	2018 10 17	N.R.L

NOTES:
1. THE PROVISION OF POLE LINES, CONDUIT, WATERMAINS, SEWER AND SEWER SERVICES AND ENERGIZED UTILITIES AND STRUCTURES TO SUCH NECESSARIES SHOWN ON THE CONTRACT DRAWINGS ARE WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE COMPLETING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND CONDUITS AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
2. WHEREVER LINES WERE PLOTTED USING MEGATERIES PLANS AND MAPS LOCATED IN THE FIELD TO VERIFY THE ACCURACY OF THESE PROPERTY LINES, A LEGAL SURVEY SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT THE REGIONAL TRAFFIC OPERATIONS MANAGER FOLLOWING THE 30-DAY SIGNAL PLANT LAYOUT. PROPERTY AND UTILITY LOCATORS MUST ALSO BE NOTIFIED. THE FINAL LOCATIONS FOR ALL TRAFFIC SIGNAL PLANT INCLUDING BUT NOT LIMITED TO CONDUIT, POLE ANCHOR, JUNCTION BOXES, CONTROLLER BASE AND LOOPS WILL BE VERIFIED IN THE FIELD BY THE NIAGARA REGION TRAFFIC SIGNAL SUPERVISOR OR DESIGNATE PRIOR TO INSTALLATION. A TRAFFIC SIGNAL INSPECTOR FROM THE REGION MUST BE ON SITE AT ALL TIMES FOR WORK DETERMINED BY THE REGIONAL TRAFFIC OPERATIONAL MANAGER AS NECESSARY WHEN TRAFFIC SIGNAL WORK IS BEING UNDERTAKEN.
4. ALL MATERIALS SHALL BE AS PER NIAGARA REGION TRAFFIC SIGNAL STANDARDS MANUAL DISTRIBUTIONS. SIGNAL SHOP WILL ALL MATERIALS WITH REGIONAL SIGNAL SUPERVISOR PRIOR TO CONSTRUCTION CONSOLIDATIONS.
5. ALL DUCTS FROM JUNCTION BOXES TO JUNCTION BOXES AND FROM JUNCTION BOXES TO TRAFFIC SIGNAL POLES SHALL INCLUDE 1-100mm CONDUIT AND 1-50mm CONDUIT UNLESS OTHERWISE SPECIFIED.
6. WHERE APPROVED FINAL POLE BASE LOCATION DIFFER FROM THE FINAL INSTALL SIGNAL, MAST ARM OR APPROPRIATE, LENGTH TO MAINTAIN POSITION OF SIGNAL HEAD AT DESIGNED LOCATION.
7. ALL TRAFFIC SIGNAL ELECTRICAL CONNECTIONS, INTERCONNECT AND FIBRE, ARE TO BE UNDERTAKEN BY AND PERFORMED BY NIAGARA REGION STAFF.

DRAFTING	N.R.L
DESIGN	N.R.L
CHECKED BY	TC
APPROVED BY	AS

Niagara Region PUBLIC WORKS

REGIONAL RD 98 (MONTROSE RD) BTWN MCLEOD RD and CHARNWOOD AVE
RR 98 (MONTROSE ROAD) at
YMCA / LOWE'S ENTRANCE
CITY OF NIAGARA FALLS
WIRING SCHEMATIC

CONSULTANT FILE No.	–
DATE	2018-01-17
SCALE	NTS
REF. No.	RN –.–
DWG. No.	TS02
REV.	2

DRAWING FILE: J:\Engineering\Regional Road 98 (Niagara Falls)\5527 Montrose Rd 98 - between McLeod and Charnwood\Drawings\Layout\MCB_SCHEMATIC.dwg PLOTTED: Oct 30, 2018 - 4:26pm PLOTTED BY: CHAITTS