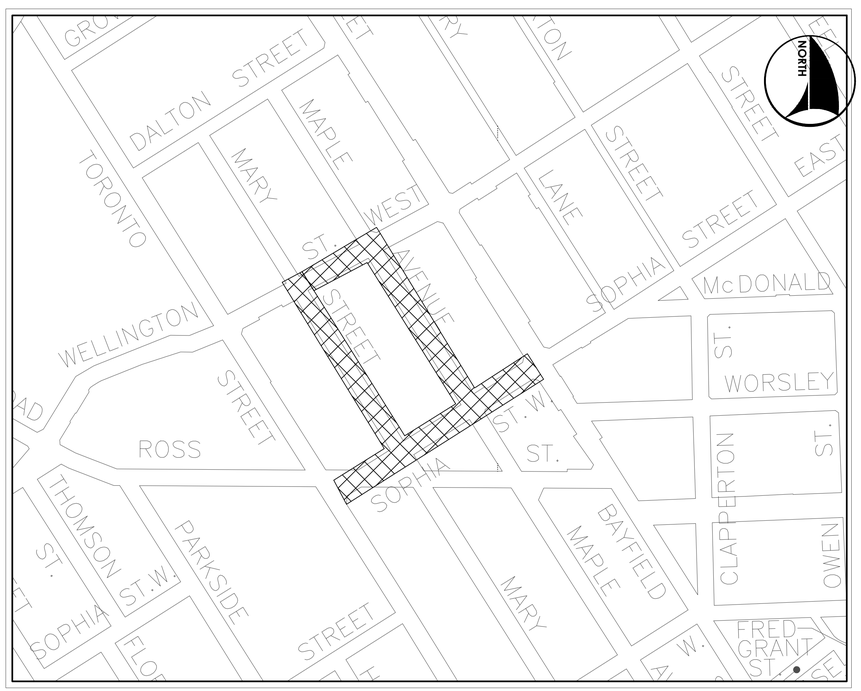
Barrie

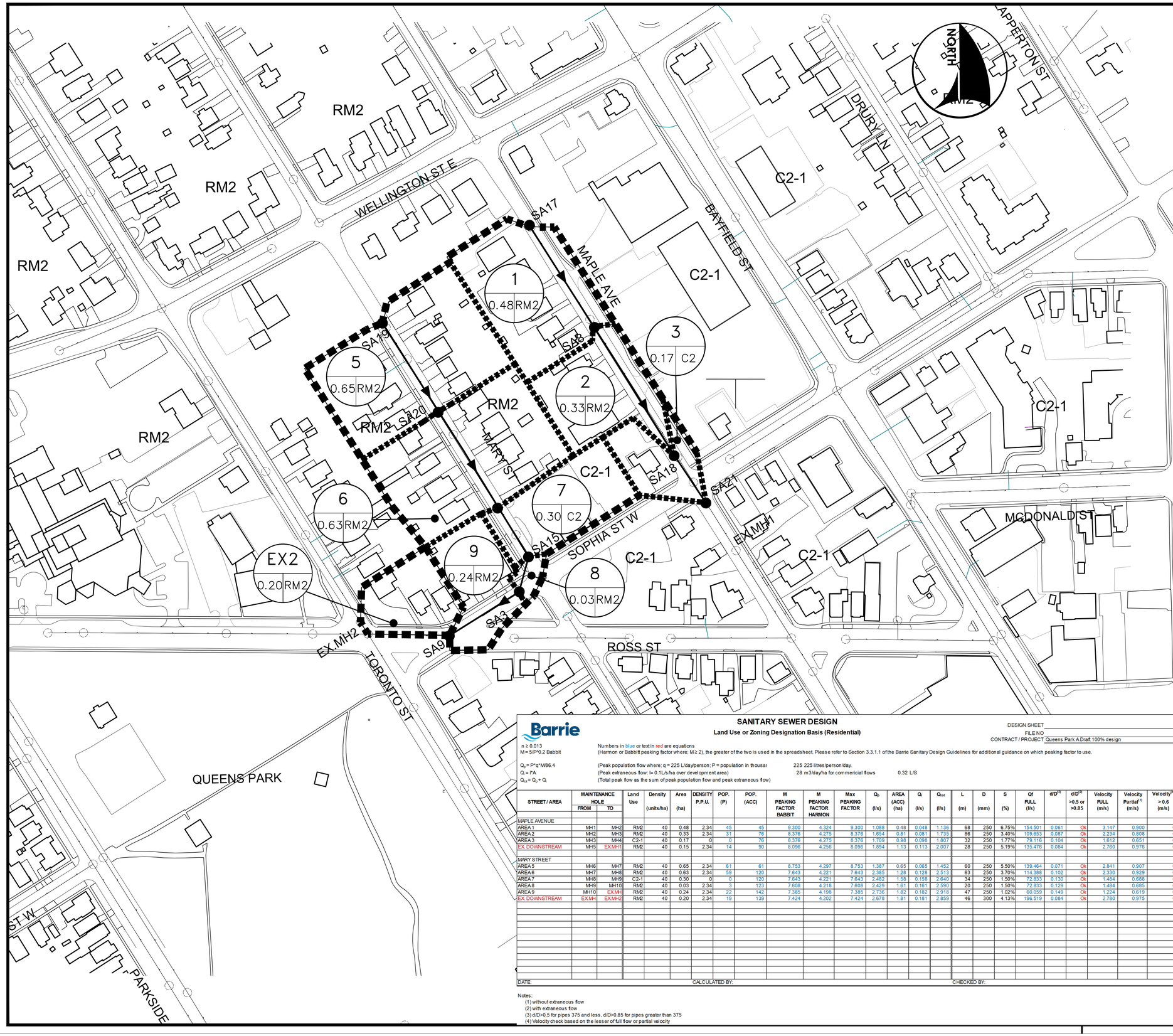
QUEEN'S PARK NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, MAPLE AVENUE, AND WELLINGTON STREET WEST

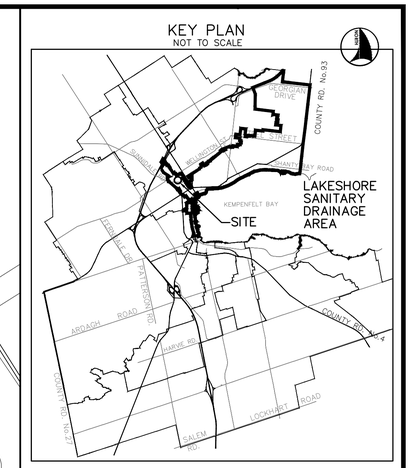


KEY PLAN
NOT TO SCALE

LIST OF DRAWINGS

TITLE –TITLE SHEET, KEY PLAN AND LIST OF DRAWINGS
SAN1 –SANITARY DRAINAGE PLAN
STM1 –STORM DRAINAGE PLAN
RM1 –REMOVALS PLAN SOPHIA STREET WEST (STA. –0+010 TO STA. 0+312)
RM2 –REMOVALS PLAN MARY STREET (STA. 0+000 TO STA. 0+274)
RM3 –REMOVALS PLAN MAPLE AVENUE (STA. 0+000 TO STA. 0+287)
RM4 –REMOVALS PLAN WELLINGTON STREET WEST (STA. 0+000 TO STA. 0+139)
PP1 –PLAN AND PROFILE SOPHIA STREET WEST (STA. –0+010 TO STA. 0+150)
PP2 –PLAN AND PROFILE SOPHIA STREET WEST (STA. 0+150 TO STA. 0+290)
PP3 –PLAN AND PROFILE MARY STREET (STA. –0+010 TO STA. 0+130)
PP4 –PLAN AND PROFILE MARY STREET (STA. 0+130 TO STA. 0+265)
PP5 –PLAN AND PROFILE MAPLE AVENUE (STA. 0+000 TO STA. 0+140)
PP6 –PLAN AND PROFILE MAPLE AVENUE (STA. 0+140 TO STA. 0+275)
PP7 –PLAN AND PROFILE WELLINGTON STREET WEST (STA. –0+010 TO STA. 0+129)
GP1 –INTERSECTION GRADING – SOPHIA AT ROSS / SOPHIA AT MARY
GP2 –INTERSECTION GRADING – SOPHIA AT MAPLE / SOPHIA AT BAYFIELD
GP3 –INTERSECTION GRADING – MARY AT WELLINGTON / MAPLE AT WELLINGTON
GP4 –GRADING PLAN SOPHIA STREET WEST (STA. –0+010 TO STA. 0+302)
GP5 –GRADING PLAN MAPLE AVENUE (STA. –0+010 TO STA. 0+277)
GP6 –GRADING PLAN MARY STREET (STA. –0+010 TO STA. 0+264)
GP7 –GRADING PLAN WELLINGTON STREET WEST (STA. 0+000 TO STA. 0+129)
ESC1 –EROSION SEDIMENT CONTROL PLAN SOPHIA STREET WEST (STA. –0+010 TO STA. 0+312)
ESC2 –EROSION SEDIMENT CONTROL PLAN MARY STREET (STA. 0+000 TO STA. 0+274)
ESC3 –EROSION SEDIMENT CONTROL PLAN MAPLE AVENUE (STA. 0+000 TO STA. 0+287)
ESC4 –EROSION SEDIMENT CONTROL PLAN WELLINGTON STREET WEST (STA. 0+000 TO STA. 0+139)
PM1 –PAVEMENT MARKINGS SOPHIA STREET WEST (STA. –0+010 TO STA. 0+302)
PM2 –PAVEMENT MARKINGS MAPLE AVENUE (STA. –0+010 TO STA. 0+277)
PM3 –PAVEMENT MARKINGS MARY STREET (STA. –0+010 TO STA. 0+264)
PM4 –PAVEMENT MARKINGS WELLINGTON STREET WEST (STA. 0+000 TO STA. 0+129)
PH1 –PHASING PLAN–SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE
T1 –STREET LIGHTING & JOINT USE–COVER PAGE
EL1 –STREET LIGHTING & JOINT USE–ELECTRICAL DESIGN–SOPHIA STREET
EL2 –STREET LIGHTING & JOINT USE–ELECTRICAL DESIGN–MARY ST. AND MAPLE AVE.
EL3 –STREET LIGHTING & JOINT USE–ELECTRIC DETAILS
EL4 –STREET LIGHTING & JOINT USE–LIGHTING DETAILS
L1 –STREET LIGHTING & JOINT USE–EXISTING PHOTOMETRICS–SOPHIA STREET
L2 –STREET LIGHTING & JOINT USE–EXISTING PHOTOMETRICS–MARY ST. AND MAPLE AVE.
L3 –STREET LIGHTING & JOINT USE–PROPOSED PHOTOMETRICS–SOPHIA STREET
L4 –STREET LIGHTING & JOINT USE–PROPOSED PHOTOMETRICS–MARY ST. AND MAPLE AVE.
E1 –STREET LIGHTING & JOINT USE–JOINT USE LAYOUT–SOPHIA STREET
E2 –STREET LIGHTING & JOINT USE–JOINT USE LAYOUT–MARY ST. AND MAPLE AVE.
P1 –STREET LIGHTING & JOINT USE–JOINT USE POLE PROFILES–SOPHIA STREET
P2 –STREET LIGHTING & JOINT USE–JOINT USE POLE PROFILES–MARY ST. AND MAPLE AVE.
TYP1 –TYPICAL SECTIONS
DET1 –LEGEND
DET2 –GENERAL NOTES AND TYPICAL SECTIONS
DET3 –RETAINING WALL DETAILS
DET4 –STANDARD DETAILS
DET5 –DETOUR PLANS





LEGEND

- SANITARY DRAINAGE DIVIDE
- CATCHMENT BOUNDARY
- LOCAL BOUNDARY
- EXISTING SANITARY SEWER AND MAINTENANCE HOLE
- PROPOSED SANITARY SEWER AND MAINTENANCE HOLE
- AREA NUMBER
- ZONING
- AREA (ha)

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	02/2021	J.B.
2.	90% DESIGN	04/2022	A.K..
3.	TENDER READY	02/2024	J.B.
4.	ISSUED FOR LSRCA	02/2024	J.B.
5.	ISSUED FOR TENDER	03/2024	J.B.
6.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KIDEY
100161850
May 16 2024
PROVINCE OF ONTARIO

Barrie

SANITARY SEWER DESIGN

Land Use or Zoning Designation Basis (Residential)

DESIGN SHEET
FILE NO
CONTRACT / PROJECT Queens Park A Draft 100% design

n ≥ 0.013
M = 5/P^0.2 Babbit

Q_d = P*q*M/86.4
Q_e = I*A
Q_{tot} = Q_d + Q_e

Numbers in blue or text in red are equations
(Harmon or Babbitt peaking factor where; M≥ 2), the greater of the two is used in the spreadsheet. Please refer to Section 3.3.1.1 of the Barrie Sanitary Design Guidelines for additional guidance on which peaking factor to use.

(Peak population flow where; q = 225 L/day/person; P = population in thousar 225 225 litres/person/day.
(Peak extraneous flow: I= 0.1L/s/ha over development area) 28 m3/day/ha for commericial flows 0.32 L/S
(Total peak flow as the sum of peak population flow and peak extraneous flow)

STREET / AREA	MAINTENANCE HOLE FROM	MAINTENANCE HOLE TO	Land Use	Density (units/ha)	Area (ha)	DENSITY P.P.U.	POP. (P)	POP. (ACC)	M PEAKING FACTOR BABBIT	M PEAKING FACTOR HARMON	Max PEAKING FACTOR	Q_d (l/s)	AREA (ACC) (ha)	Q_e (l/s)	Q_{tot} (l/s)	L (m)	D (mm)	S (%)	Qf FULL (l/s)	d/D(2)	d/D(3) >0.5 or >0.85	Velocity FULL (m/s)	Velocity Partial(1) (m/s)	Velocity(4) > 0.6 (m/s)
MAPLE AVENUE																								
AREA 1	MH1	MH2	RM2	40	0.48	2.34	45	45	9.300	4.324	9.300	1.086	0.48	0.048	1.136	68	250	6.75%	154.501	0.061	Ok	3.147	0.900	Ok
AREA 2	MH2	MH3	RM2	40	0.33	2.34	31	76	8.376	4.275	8.376	1.654	0.81	0.081	1.735	86	250	3.40%	109.653	0.087	Ok	2.234	0.808	Ok
AREA 3	MH3	MH4	C2-1	40	0.17	0	0	76	8.376	4.275	8.376	1.709	0.98	0.098	1.807	32	250	1.77%	79.116	0.104	Ok	1.612	0.651	Ok
EX DOWNSTREAM	MH5	EXMH1	RM2	40	0.15	2.34	14	90	8.096	4.256	8.096	1.894	1.13	0.113	2.007	28	250	5.19%	135.476	0.084	Ok	2.760	0.976	Ok
MARY STREET																								
AREA 5	MH6	MH7	RM2	40	0.65	2.34	61	61	8.753	4.297	8.753	1.387	0.65	0.065	1.452	60	250	5.50%	139.464	0.071	Ok	2.841	0.907	Ok
AREA 6	MH7	MH8	RM2	40	0.63	2.34	59	120	7.643	4.221	7.643	2.385	1.28	0.128	2.513	63	250	3.70%	114.388	0.102	Ok	2.330	0.929	Ok
AREA 7	MH8	MH9	C2-1	40	0.30	0	0	120	7.643	4.221	7.643	2.482	1.58	0.158	2.640	34	250	1.50%	72.833	0.130	Ok	1.484	0.688	Ok
AREA 8	MH9	MH10	RM2	40	0.03	2.34	3	123	7.608	4.218	7.608	2.429	1.61	0.161	2.590	20	250	1.50%	72.833	0.129	Ok	1.484	0.685	Ok
AREA 9	MH10	EXMH	RM2	40	0.24	2.34	22	142	7.385	4.198	7.385	2.736	1.82	0.182	2.918	47	250	1.02%	60.059	0.149	Ok	1.224	0.619	Ok
EX DOWNSTREAM	EXMH	EXMH2	RM2	40	0.20	2.34	19	139	7.424	4.202	7.424	2.678	1.81	0.181	2.859	46	300	4.13%	196.519	0.084	Ok	2.760	0.975	Ok

DATE: CALCULATED BY: CHECKED BY:

Notes:
(1) without extraneous flow
(2) with extraneous flow
(3) d/D>0.5 for pipes 375 and less, d/D>0.85 for pipes greater than 375
(4) Velocity check based on the lesser of full flow or partial velocity

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

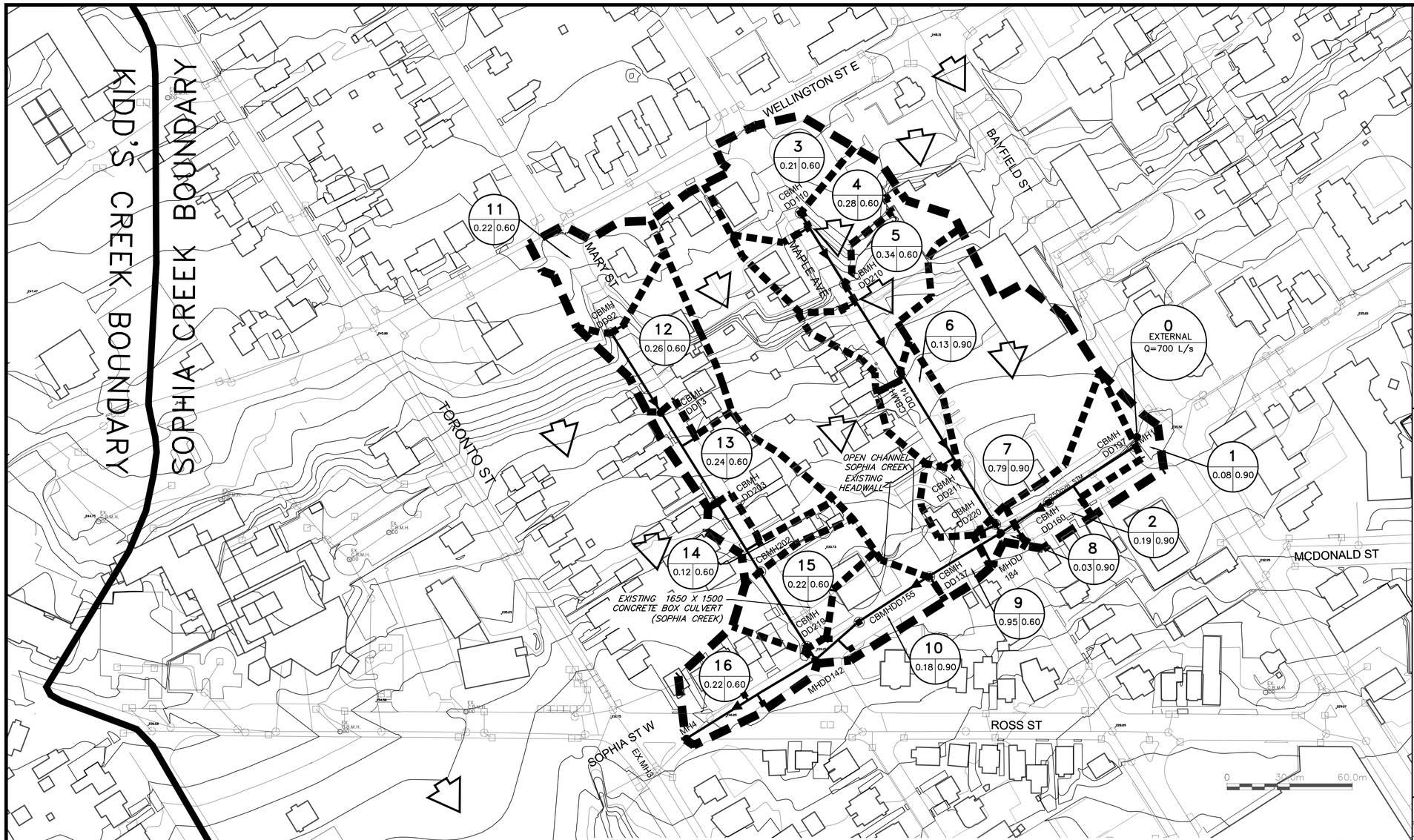
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

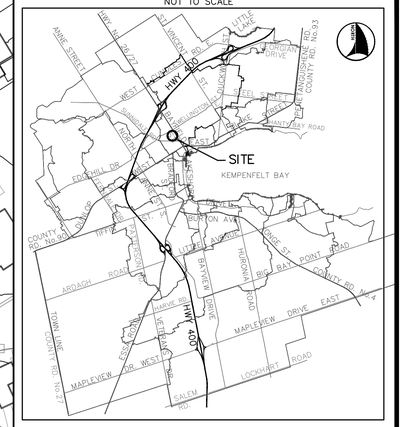
SANITARY DRAINAGE PLAN

Barrie

INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:750	VERT.	NA	CONTRACT NO. 2024–108T
DESIGN	J.D.H.	DRAWN	J.D.H.	
REVIEWED	J.B.	DATE	2024.05.16	SHEET NO. SAN1





STORM LEGEND

- DRAINAGE BOUNDARY
- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- MAJOR SYSTEM FLOW
- MINOR SYSTEM FLOW
- 1 (SUBCATCHMENT) 2.45 (AREA (ha)) 0.70 (RUNOFF COEFFICIENT)
- 375mmø — EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- PROPOSED DOUBLE CATCH BASIN
- PROP.STM. MH. — PROPOSED STORM MAINTENANCE HOLE

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	02/2021	J.B.
2.	90% DESIGN	04/2022	A.K..
3.	TENDER READY	02/2024	J.B.
4.	ISSUED FOR LSRCA	02/2024	J.B.
5.	ISSUED FOR TENDER	02/2024	J.B.
6.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161850
May 16 2024
PROVINCE OF ONTARIO

5 Year

A = 843.019
B = 4.582
C = 0.763
Runoff Coefficient Adjustment = 1

CITY of BARRIE
STORM SEWER DESIGN SHEET (D702A v1.1)
EN1280 QUEENS PARK A1 NEIGHBOURHOOD RENEWAL
February 16, 2024

Acceptable
Review
Incorrect

File No: EN1280
Design Sheet: AK
Calculated By: AK
Checked By: DF

Catchment Area	Street Name	Maintenance Hole Number From	Maintenance Hole Number To	Runoff Calculations: Runoff Coefficent C	Runoff Coefficient w/ Adjustment C'	Area A (Ha)	Incremental C*A	Total C*A	Time of Concentration: Total (minutes)	Flow Time In Pipe (minutes)	Intensity (mm/hr)	Total Q (m^3/s)	Hydraulic Calculations: Diameter (mm)	Mannings N	Length (m)	Slope (%)	Q_{pipe} (m^3/s)	Velocity (m/s)	Capacity Check Q / Q_{pipe} (%)
3	MAPLE AVENUE	CBMH-DD110	CBMH-DD210	0.600	0.600	0.210	0.126	0.126	10.000	0.172	109.105	0.038	300	0.013	40.000	8.000	0.274	3.869	14.0%
4	MAPLE AVENUE	CBMH-DD210	CBMH-DD14	0.600	0.600	0.280	0.168	0.294	10.172	0.222	108.132	0.088	300	0.013	50.000	7.500	0.265	3.747	33.3%
5	MAPLE AVENUE	CBMH-DD14	CBMHDD211	0.600	0.600	0.340	0.204	0.498	10.395	0.340	106.904	0.148	375	0.013	52.100	2.590	0.282	2.555	52.4%
6	MAPLE AVENUE	CBMHDD211	CBMHDD220	0.900	0.900	0.130	0.117	0.615	10.735	0.167	105.089	0.180	450	0.013	32.790	3.320	0.519	3.266	34.6%
7	MAPLE AVENUE	CBMHDD220	MH2	0.900	0.900	0.790	0.711	1.326	10.902	0.030	104.222	0.384	450	0.013	5.610	3.000	0.494	3.105	77.7%
11	MARY STREET	CBMH-D092	CBMH-DD13	0.600	0.600	0.220	0.132	0.132	10.000	0.194	109.105	0.040	300	0.013	45.000	8.000	0.274	3.869	14.6%
12	MARY STREET	CBMH-DD13	CBMH-DD203	0.600	0.600	0.260	0.156	0.288	10.194	0.263	108.011	0.086	300	0.013	50.600	5.500	0.227	3.208	38.1%
13	MARY STREET	CBMH-DD203	CBMH-DD202	0.600	0.600	0.240	0.144	0.432	10.457	0.221	106.568	0.128	375	0.013	39.400	3.500	0.328	2.970	39.0%
14	MARY STREET	CBMH-DD202	CBMH-DD219	0.600	0.600	0.120	0.072	0.504	10.678	0.236	105.388	0.148	450	0.013	39.460	2.420	0.444	2.789	33.3%
15	MARY STREET	CBMH-DD219	MH- DD142	0.600	0.600	0.220	0.13	0.636	10.914	0.065	104.162	0.184	450	0.013	9.650	1.930	0.396	2.490	46.5%
N/A	SOPHIA STREET	MH-DD158	CBMH-DD197	0.90	0.90	0.00	0.00	0.000	10.000	0.036	109.105	0.700	675	0.013	5.090	0.980	0.832	2.325	84.1%
1	SOPHIA STREET	CBMH-DD197	CBMH-DD160	0.90	0.90	0.08	0.07	0.072	10.036	0.306	108.897	0.722	750	0.013	46.200	1.000	1.113	2.520	64.8%
2 (3-7)	SOPHIA STREET	CBMH-DD160	MH-DD184	0.90	0.90	0.19	0.17	1.569	10.932	0.179	104.067	1.154	825	0.013	27.360	0.900	1.362	2.547	84.7%
8	SOPHIA STREET	MH-DD184	CBMH-DD137	0.90	0.90	0.03	0.03	1.596	11.111	0.214	103.160	1.157	900	0.013	40.000	1.200	1.983	3.117	58.4%
9	SOPHIA STREET	CBMH-DD137	CBMH-DD155	0.60	0.60	0.95	0.57	2.166	11.325	0.175	102.100	1.314	900	0.013	40.000	1.800	2.429	3.818	54.1%
10	SOPHIA STREET	CBMH-DD155	MH- DD142	0.60	0.60	0.18	0.11	2.274	11.500	0.161	101.253	1.340	900	0.013	27.710	1.010	1.819	2.860	73.6%
16 (11-15)	SOPHIA STREET	MH- DD142	MH-4	0.60	0.60	0.22	0.13	3.042	11.661	0.404	100.484	1.549	900	0.013	72.400	1.100	1.899	2.985	81.6%

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

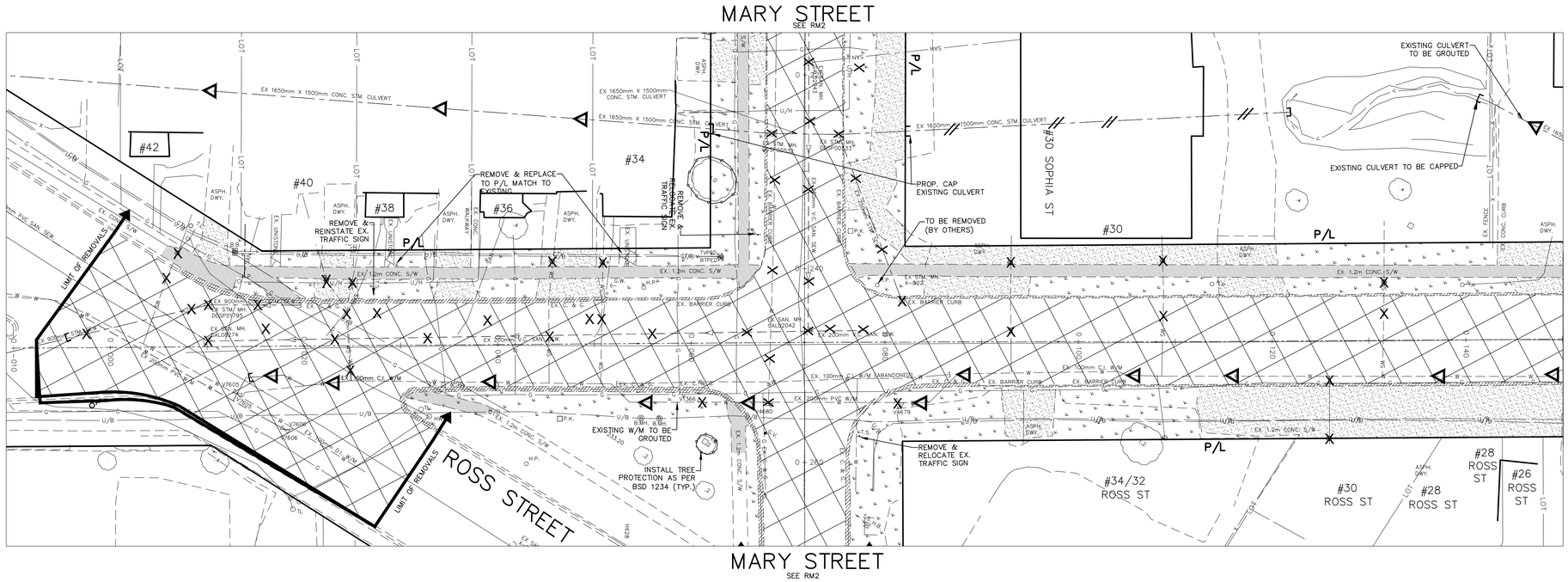
STORM DRAINAGE PLAN

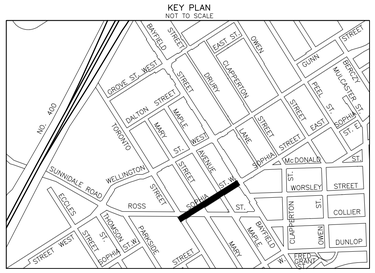
Barrie

INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:1000	VERT.	N/A	CONTRACT NO.	2024–108T
DESIGN	T.F.	DRAWN	T.F.	SHEET NO.	STM1
REVIEWED	A.K.	DATE	2024.05.16		

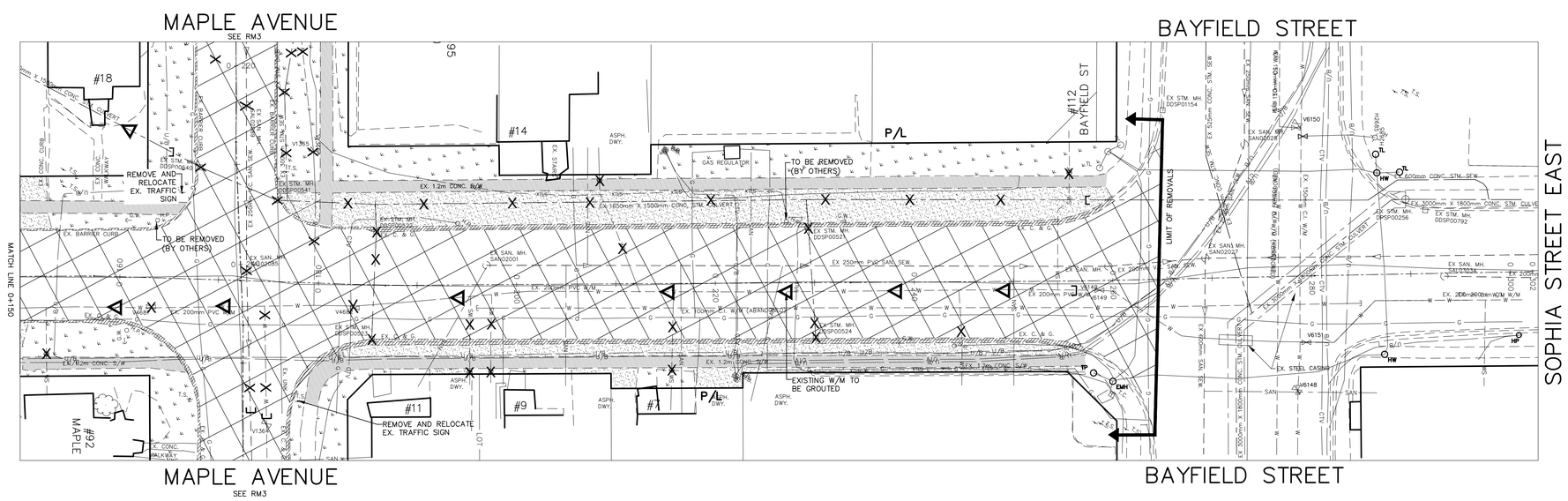
SOPHIA STREET WEST





LEGEND

- (TBR) TO BE REMOVED
- ASPHALT REMOVAL (FULL DEPTH)
- SIDEWALK REMOVAL
- PAVING STONE REMOVAL
- TOPSOIL/ORGANIC REMOVAL AND REPLACEMENT
- ASPHALT DRIVEWAY REMOVAL
- CONCRETE DRIVEWAY REMOVAL
- GRANULAR DRIVEWAY REMOVAL
- CURB AND GUTTER REMOVAL
- X PIPE OR STRUCTURE REMOVAL
- // PIPE ABANDONMENT
- [LIMIT OF PIPE REMOVAL/ PIPE CAP
-] TREE PROTECTION FENCING
- ▷ GROUT EXISTING PIPE



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

REMOVALS PLAN – SOPHIA STREET WEST
STA –0+010 TO STA 0+312

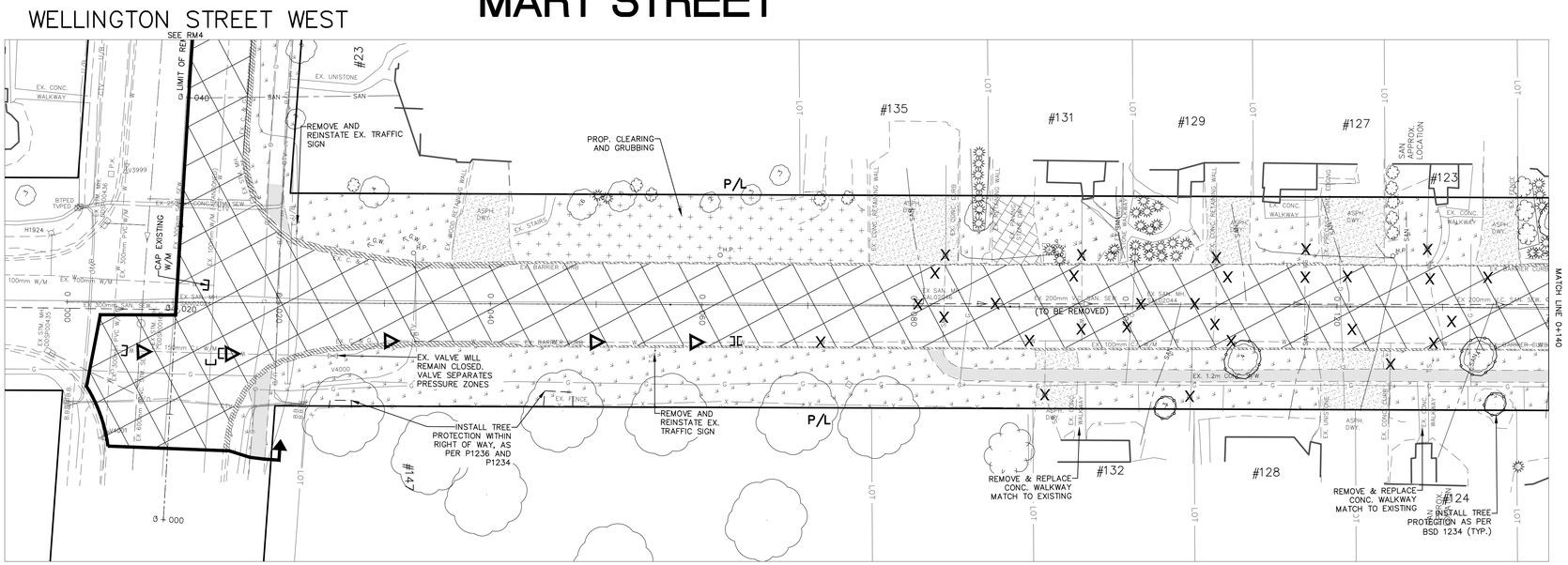
Barrie

INFRASTRUCTURE DEPARTMENT

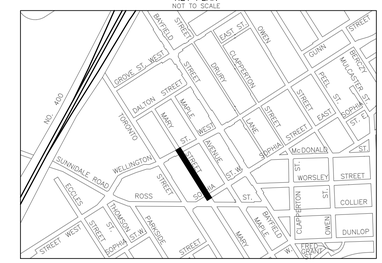
SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO.	2024–108T
DESIGN	J.D.H.	DRAWN	J.D.H.	SHEET NO.	RM1
REVIEWED	J.B.	DATE	2024.05.16		

5/16/2024 1:47 PM JASMINE GROSSE REMOVALS.DWG

MARY STREET



KEY PLAN
NOT TO SCALE

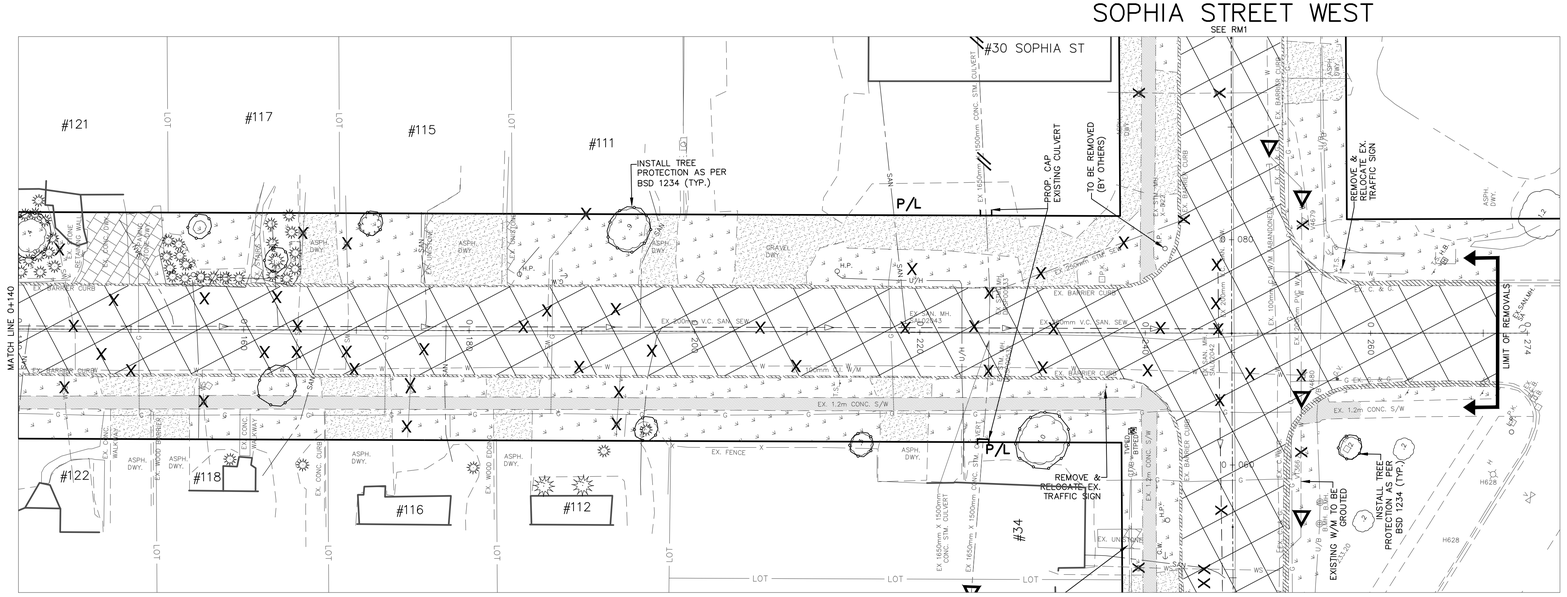


NORTH

LEGEND

- (TBR) TO BE REMOVED
- ASPHALT REMOVAL (FULL DEPTH)
- SIDEWALK REMOVAL
- PAVING STONE REMOVAL
- TOPSOIL/ORGANIC REMOVAL AND REPLACEMENT
- CLEARING AND GRUBBING
- ASPHALT DRIVEWAY REMOVAL
- CONCRETE DRIVEWAY REMOVAL
- GRANULAR DRIVEWAY REMOVAL
- CURB AND GUTTER REMOVAL
- PIPE OR STRUCTURE REMOVAL
- PIPE ABANDONMENT
- LIMIT OF PIPE REMOVAL/ PIPE CAP
- TREE PROTECTION FENCING
- GROUT EXISTING PIPE

SOPHIA STREET WEST



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597) AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL), UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET-UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161850
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

REMOVALS PLAN – MARY STREET
STA 0+000 TO STA 0+274

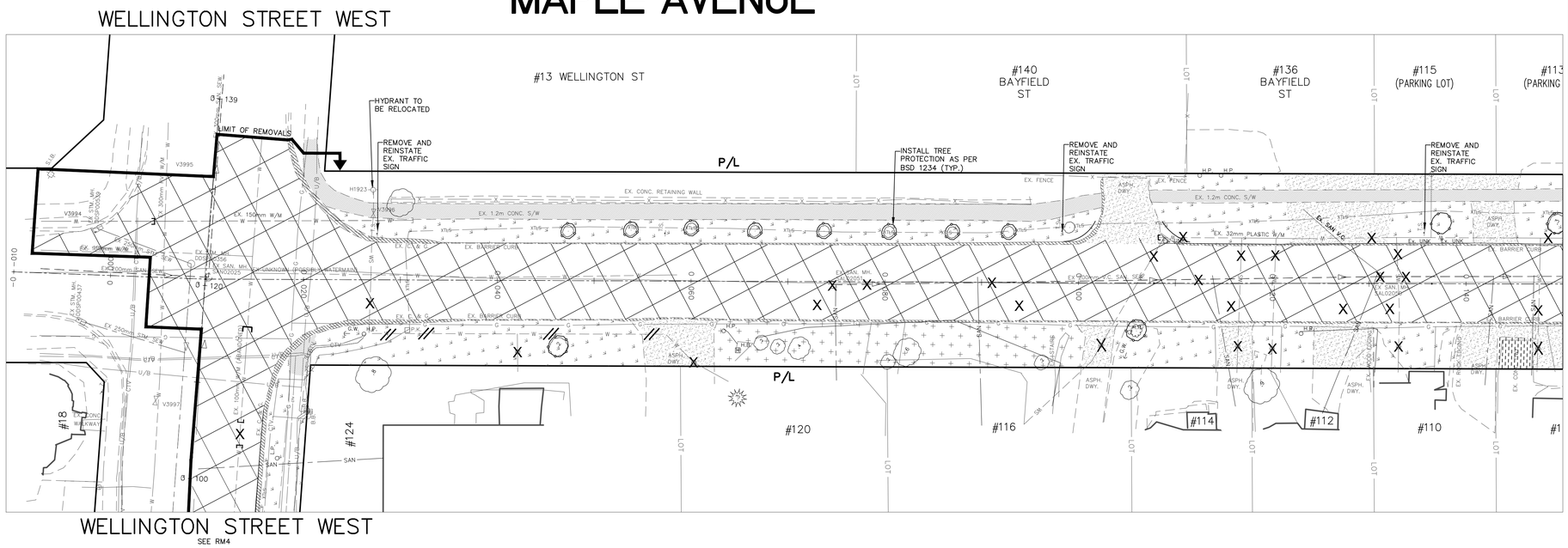
Barrie

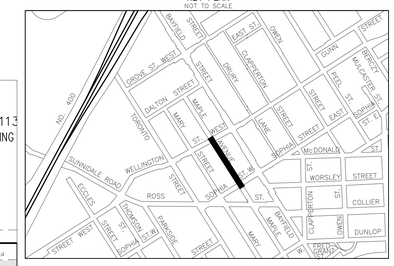
INFRASTRUCTURE DEPARTMENT

SCALE HOR. 1:250	VERT. 1:50	CONTRACT NO.	2024–108T
DESIGN J.D.H.	DRAWN J.D.H.	SHEET NO.	RM2
REVIEWED J.B.	DATE 2024.05.16		

5/16/2024 1:48 PM JASMINE GROSSE REMOVALS.DWG

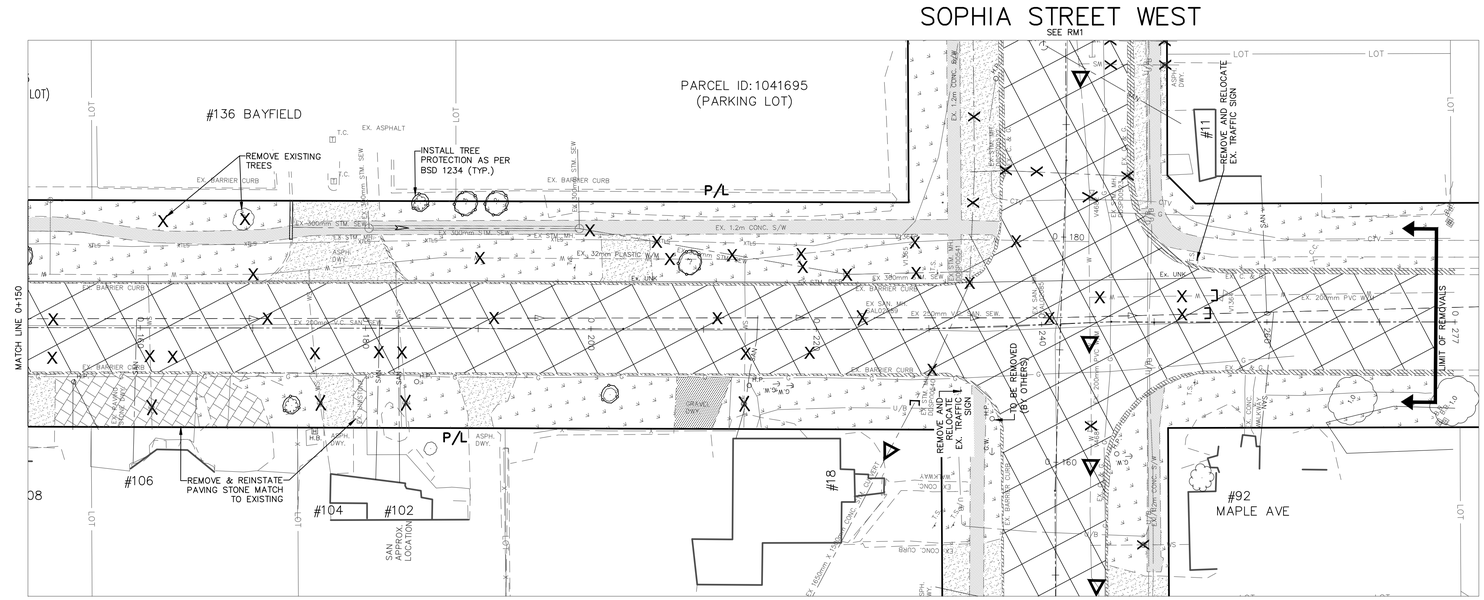
MAPLE AVENUE





LEGEND

(TBR)	TO BE REMOVED
	ASPHALT REMOVAL (FULL DEPTH)
	SIDEWALK REMOVAL
	PAVING STONE REMOVAL
	TOPSOIL/ORGANIC REMOVAL AND REPLACEMENT
	CLEARING AND GRUBBING
	ASPHALT DRIVEWAY REMOVAL
	CONCRETE DRIVEWAY REMOVAL
	GRANULAR DRIVEWAY REMOVAL
	CURB AND GUTTER REMOVAL
X	PIPE OR STRUCTURE REMOVAL
//	PIPE ABANDONMENT
[	LIMIT OF PIPE REMOVAL/ PIPE CAP
	TREE PROTECTION FENCING
▷	GROUT EXISTING PIPE



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V00119681U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161850
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

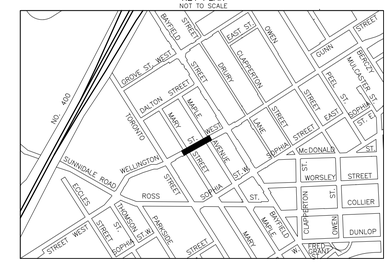
REMOVALS PLAN – MAPLE AVENUE
STA. 0+000 TO STA. 0+287

Barrie
INFRASTRUCTURE DEPARTMENT

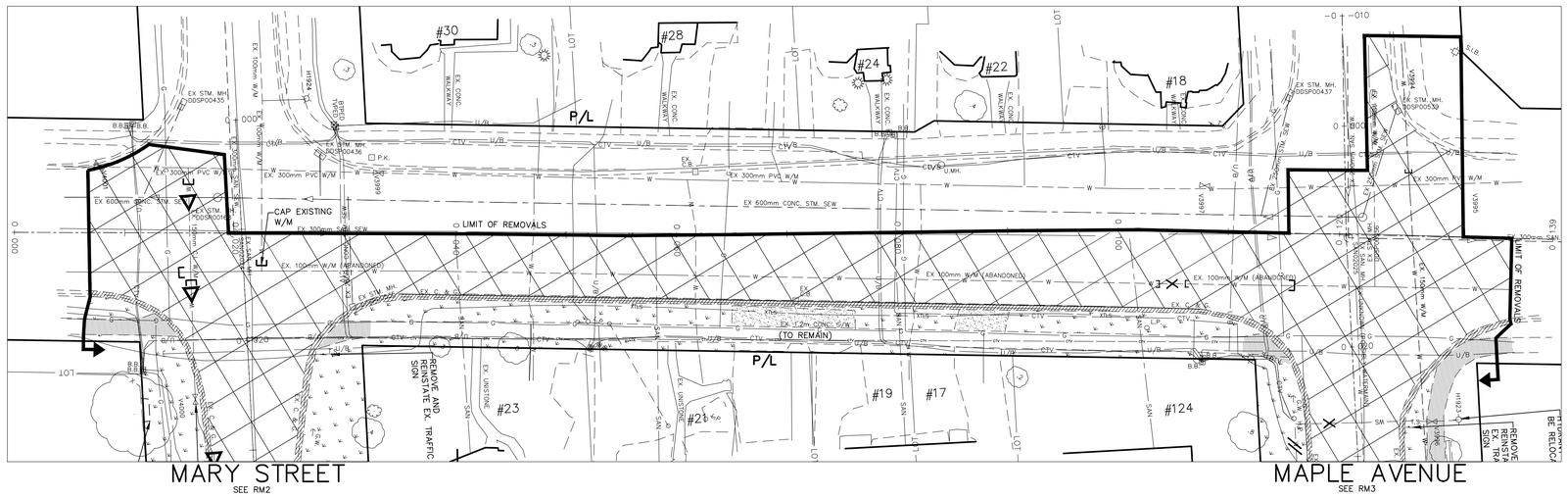
SCALE HOR.	1:250	VERT.		CONTRACT NO.	2024–108T
DESIGN	J.D.H.	DRAWN	J.D.H.	SHEET NO.	RM3
REVIEWED	J.B.	DATE	2024.05.16		

5/16/2024 1:48 PM JASMINE GROSSE REMOVALS.DWG

KEY PLAN
NOT TO SCALE



WELLINGTON STREET WEST



NORTH

LEGEND

(TBR)	TO BE REMOVED
	ASPHALT REMOVAL (FULL DEPTH)
	SIDEWALK REMOVAL
	PAVING STONE REMOVAL
	TOPSOIL/ORGANIC REMOVAL AND REPLACEMENT
	ASPHALT DRIVEWAY REMOVAL
	CONCRETE DRIVEWAY REMOVAL
	GRANULAR DRIVEWAY REMOVAL
	CURB AND GUTTER REMOVAL
X	PIPE OR STRUCTURE REMOVAL
//	PIPE ABANDONMENT
[	LIMIT OF PIPE REMOVAL/ PIPE CAP
⌉	TREE PROTECTION FENCING
▷	GROUT EXISTING PIPE

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

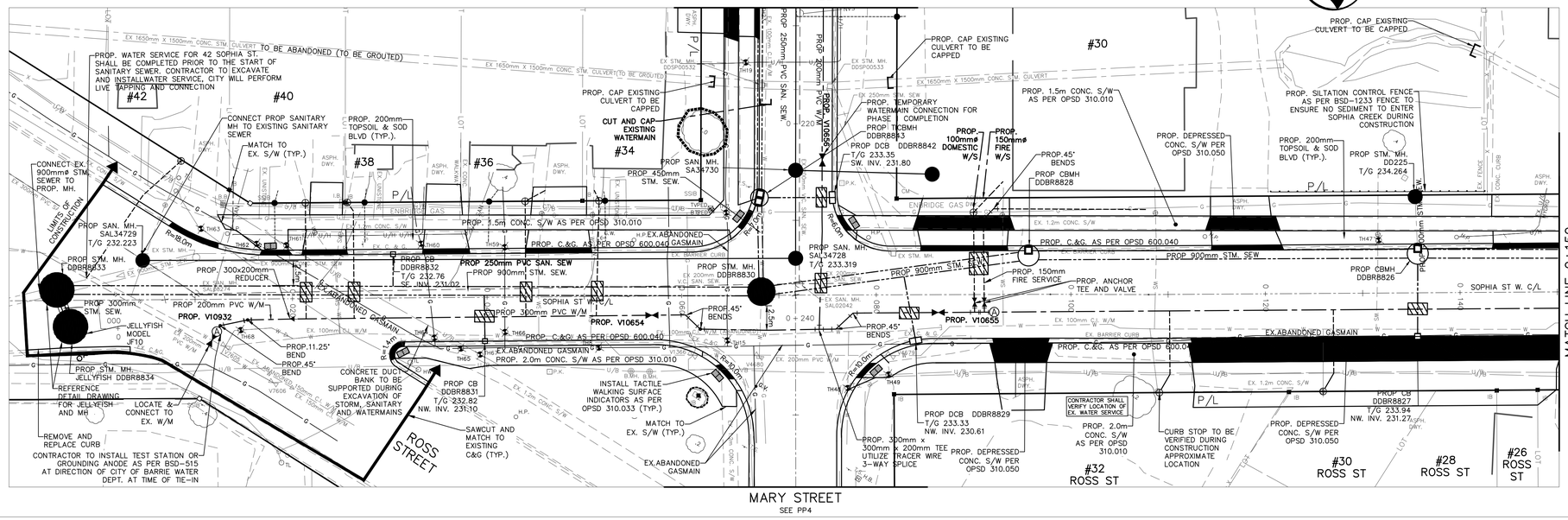
QUEEN'S PARK NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE
REMOVALS PLAN – WELLINGTON ST WEST
STA. 0+000 TO STA. 0+139

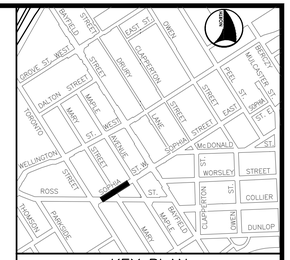
Barrie
INFRASTRUCTURE DEPARTMENT

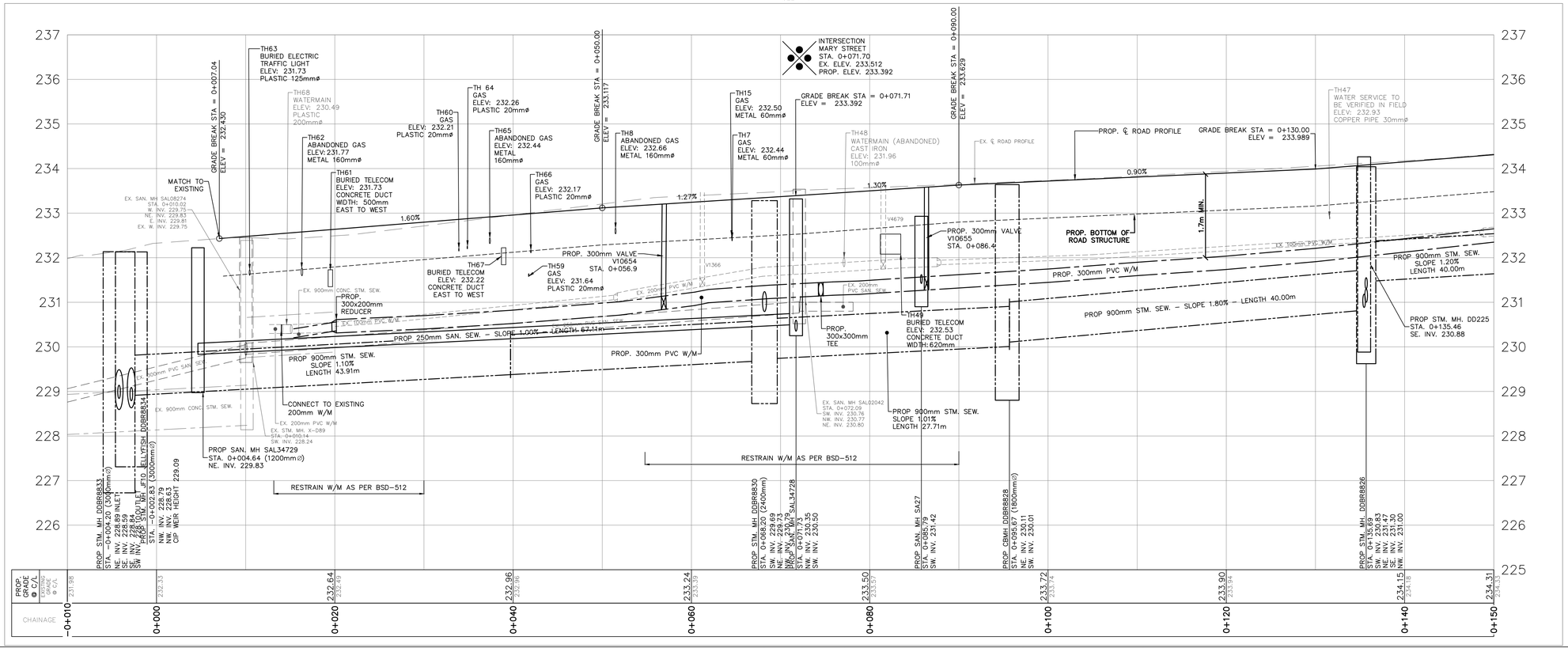
SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO.	2024–108T
DESIGN	J.D.H.	DRAWN	J.D.H.	SHEET NO.	RM4
REVIEWED	J.B.	DATE	2024.05.16		

5/16/2024 1:48 PM JASMINE GROSSE REMOVALS.DWG

SOPHIA STREET WEST







GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL), UTM COORDINATES

BENCH MARK V001196BU502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER A. J. KIDEY 100161950 May 16 2024 PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

PLAN AND PROFILE – SOPHIA STREET WEST STA. –0+010 TO STA. 0+150

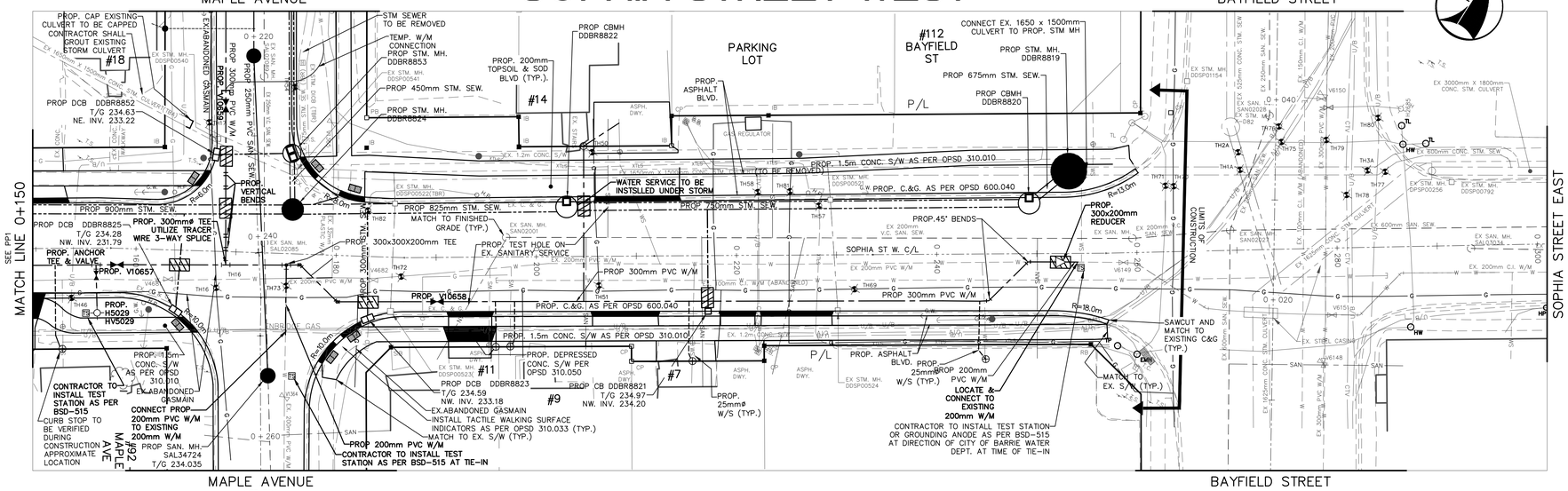
Barrie

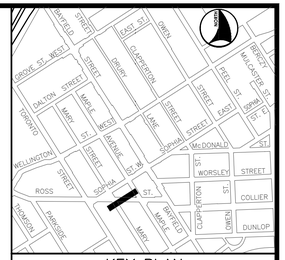
INFRASTRUCTURE DEPARTMENT

SCALE HOR. 1:250	VERT. 1:50	CONTRACT NO.	2024–108T
DESIGN J.D.H.	DRAWN J.D.H.	SHEET NO.	PP1
REVIEWED J.B.	DATE 2024.05.16		

5/17/2024 10:43 AM JASMINE GROSSE PROPOSED.DWG

SOPHIA STREET WEST

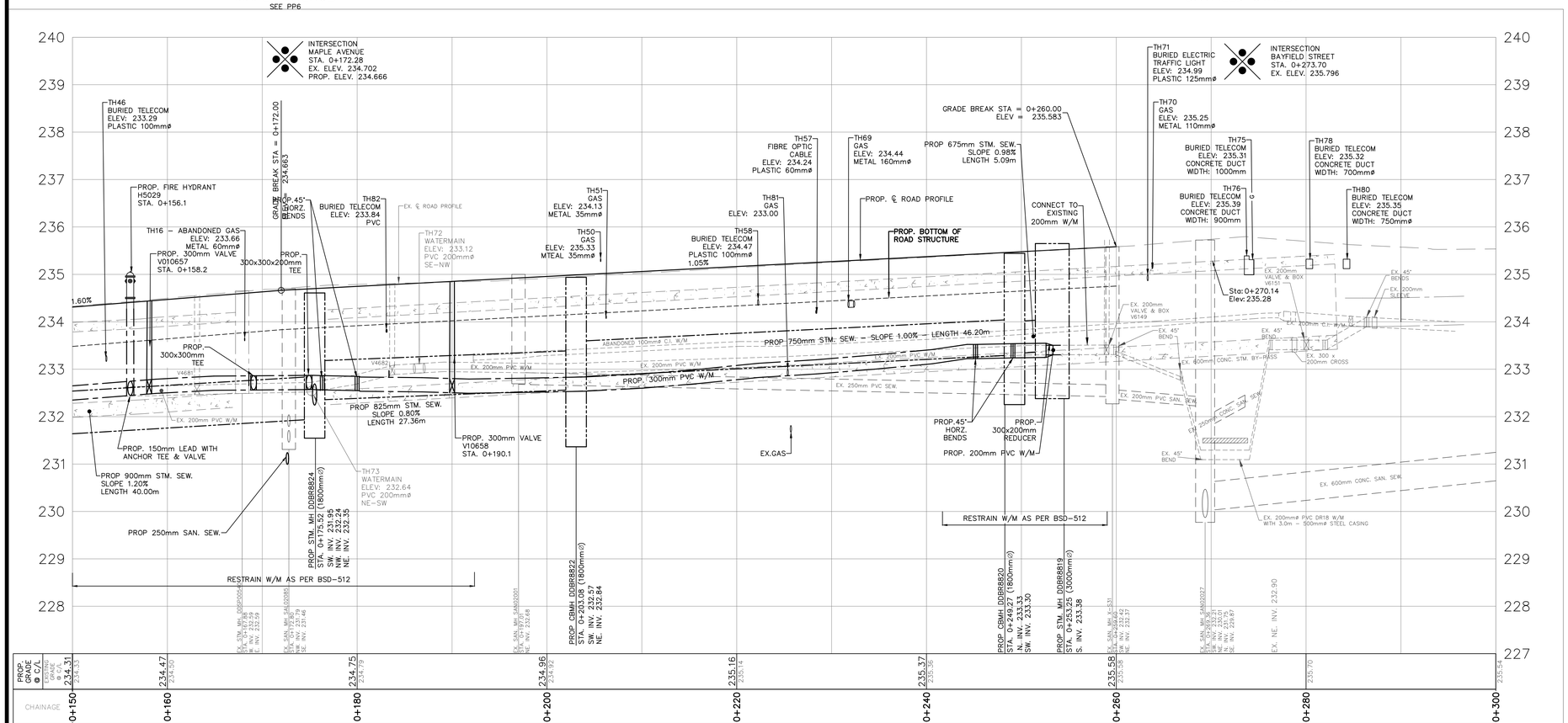




LEGEND

PROP. 100mm HI-40 STYROFOAM INSULATION OR APPROVED EQUIVALENT. 2.0 X 1.2m (TYP.)

PROP. DEPRESSED CURB AND DEPRESSED SIDEWALK



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597) AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V00119968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER A. J. KILEY 100161950 May 16 2024 PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

PLAN AND PROFILE – SOPHIA STREET WEST STA. 0+150 TO STA. 0+290

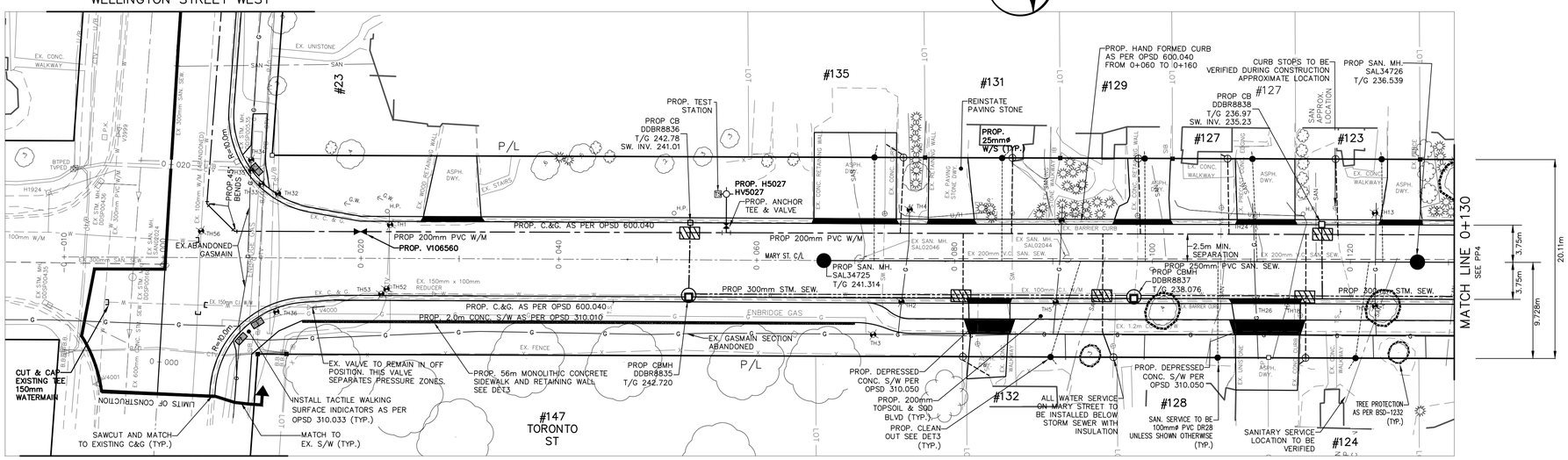
Barrie

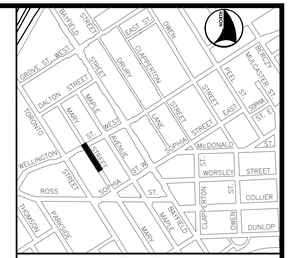
INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO.	2024–108T
DESIGN	J.D.H.	DRAWN	J.D.H.	SHEET NO.	PP2
REVIEWED	J.B.	DATE	2024.05.16		

5/17/2024 10:43 AM JASMINE GROSSE PROPOSED.DWG

MARY STREET



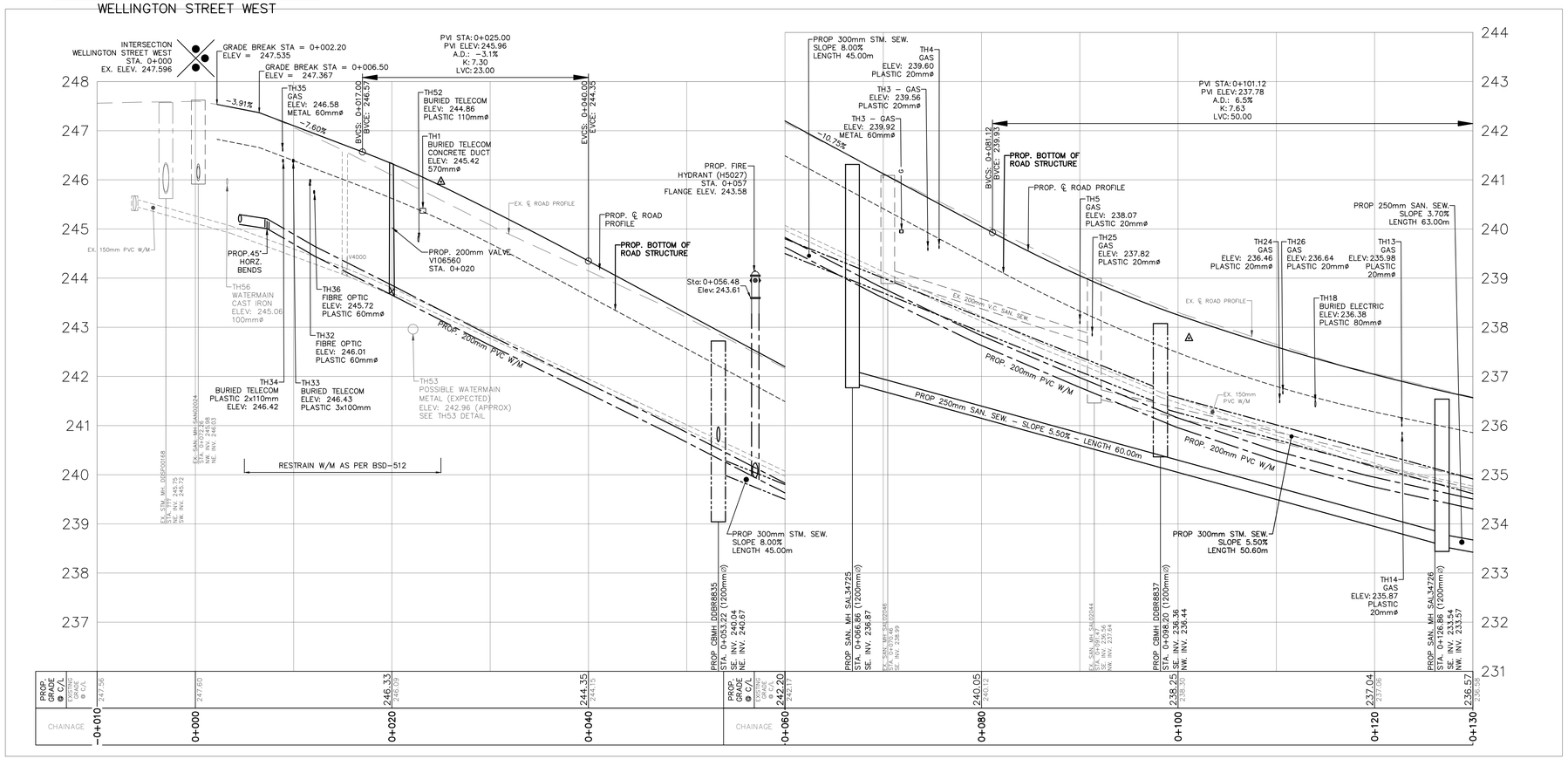


KEY PLAN
NOT TO SCALE

LEGEND

PROP. 100mm HI-40 STYROFOAM INSULATION OR APPROVED EQUIVALENT. 2.0 X 1.2m (TYP.)

PROP. DEPRESSED CURB AND DEPRESSED SIDEWALK



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS
DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597), AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL), UTM COORDINATES

BENCH MARK V00119681U502
237.270 COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

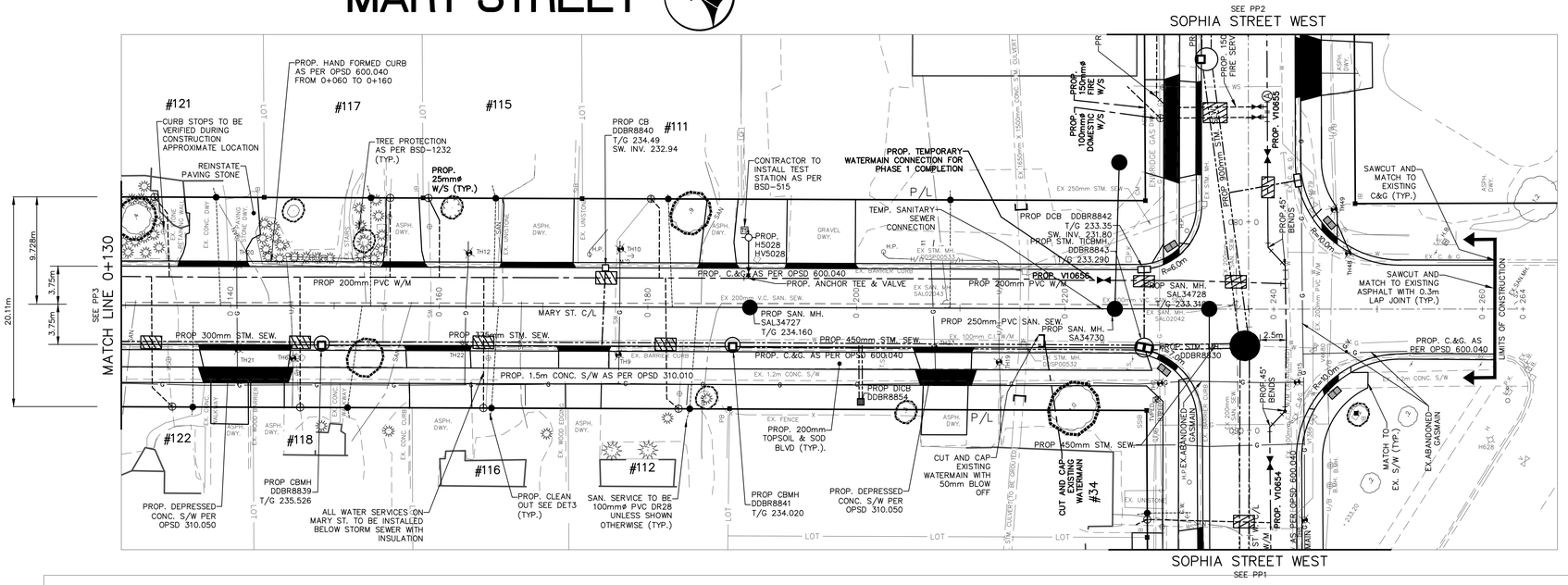
PLAN AND PROFILE – MARY STREET
STA. -0+010 TO STA. 0+130

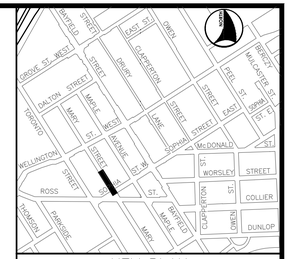
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO. 2024-108T
DESIGN	J.D.H.	DRAWN	J.D.H.	SHEET NO. PP3
REVIEWED	J.B.	DATE	2024.05.16	

5/17/2024 10:44 AM JASMINE GROSSE PROPOSED.DWG

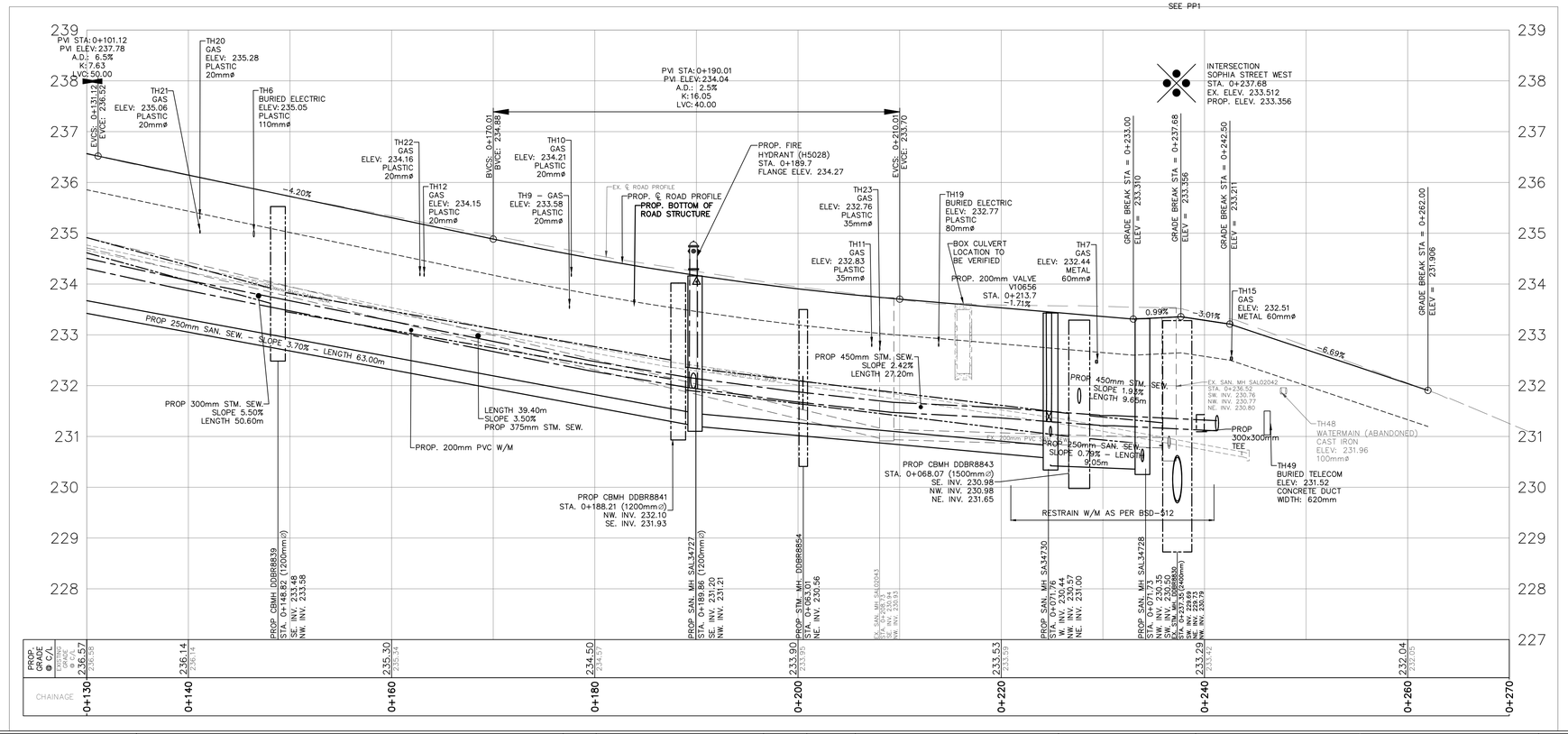
MARY STREET





LEGEND

- PROP. 100mm HI-40 STYROFOAM INSULATION OR APPROVED EQUIVALENT. 2.0 X 1.2m (TYP.)
- PROP. DEPRESSED CURB AND DEPRESSED SIDEWALK



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V001196BU502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

PLAN AND PROFILE – MARY STREET

STA. 0+130 TO STA. 0+265

Barrie

INFRASTRUCTURE DEPARTMENT

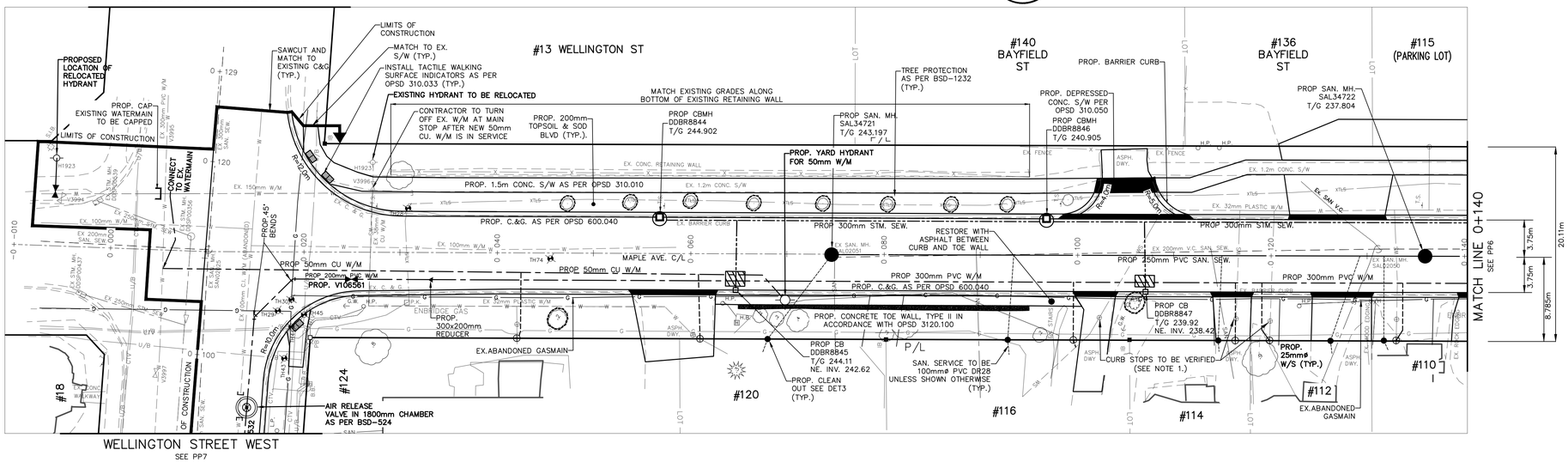
SCALE HOR.	1:250	VERT.	1:50
DESIGN	J.D.H.	DRAWN	J.D.H.
REVIEWED	J.B.	DATE	2024.05.16

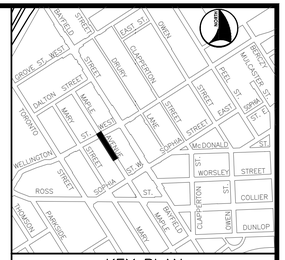
CONTRACT NO. 2024–108T

SHEET NO. PP4

5/17/2024 10:44 AM JASMINE GROSSE PROPOSED.DWG

MAPLE AVENUE

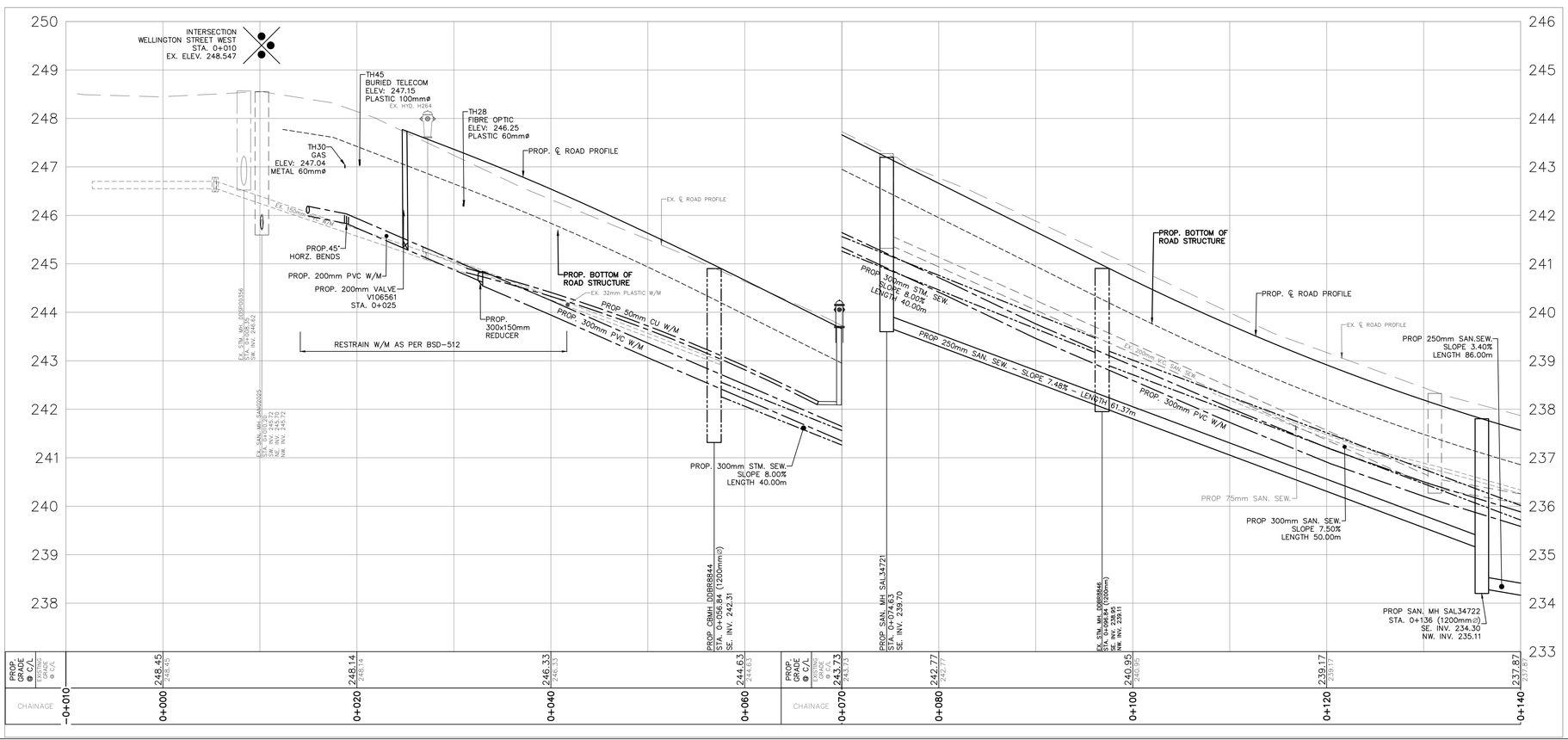




LEGEND

PROP. 100mm HI-40 STYROFOAM INSULATION OR APPROVED EQUIVALENT. 2.0 X 1.2m (TYP.)

PROP. DEPRESSED CURB AND DEPRESSED SIDEWALK



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS
DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597) AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V00119681U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILLEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

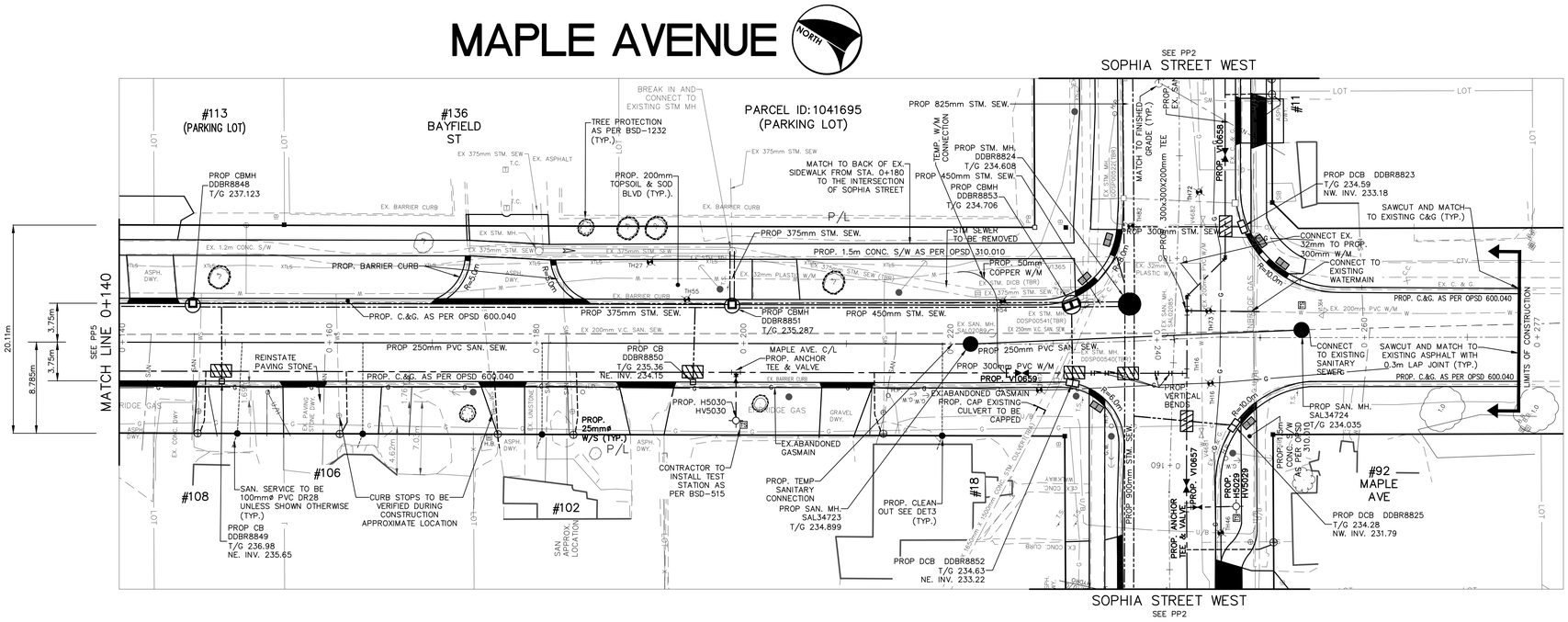
PLAN AND PROFILE – MAPLE AVENUE
STA. 0+000 TO STA. 0+140

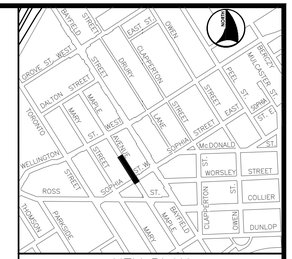
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR. 1:250	VERT. 1:50	CONTRACT NO. 2024-108T	
DESIGN J.D.H.	DRAWN J.D.H.	SHEET NO. PP5	
REVIEWED J.B.	DATE 2024.05.16		

5/17/2024 10:44 AM JASMINE GROSSE PROPOSED.DWG

MAPLE AVENUE

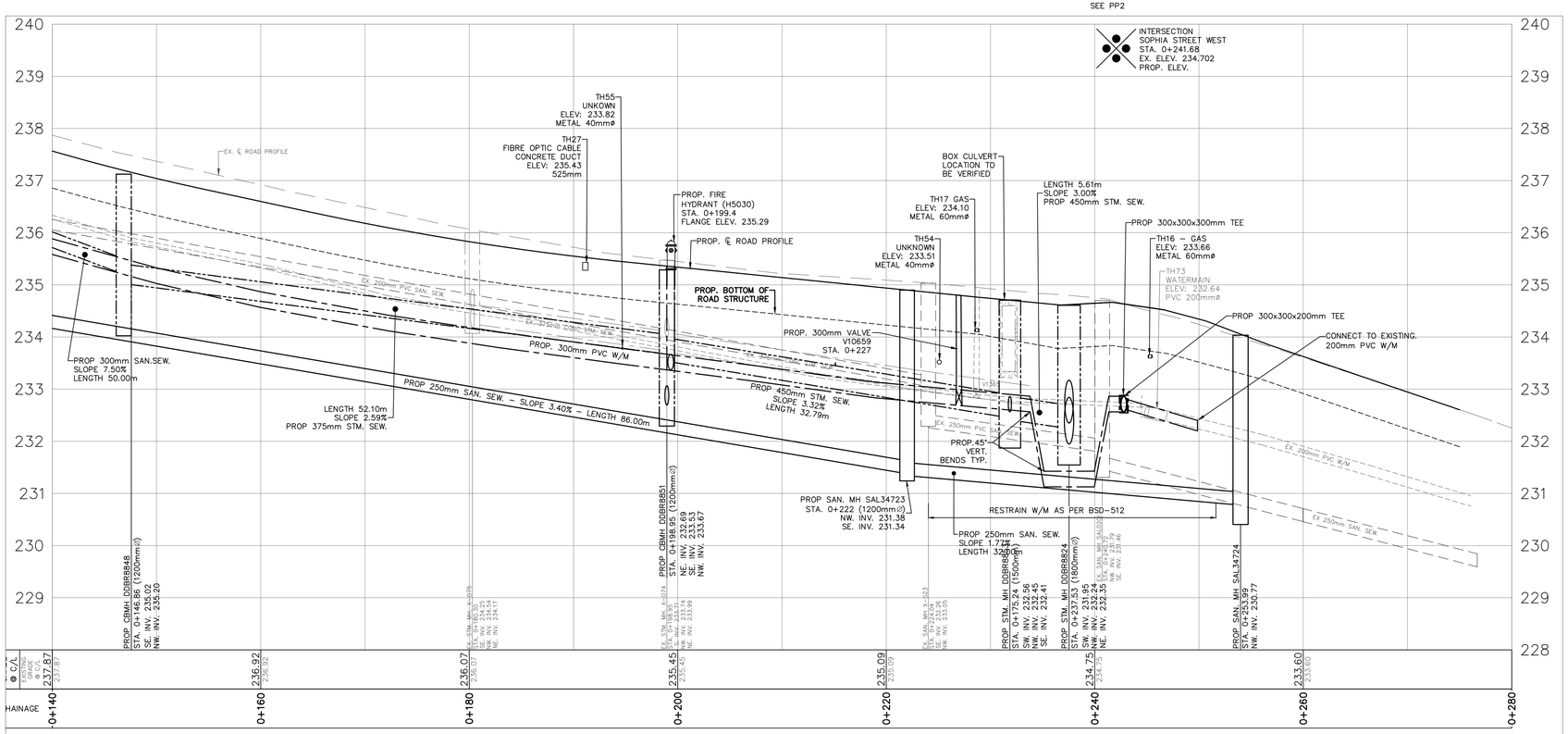




LEGEND

PROP. 100mm HI-40 STYROFOAM INSULATION OR APPROVED EQUIVALENT. 2.0 X 1.2m (TYP.)

PROP. DEPRESSED CURB AND DEPRESSED SIDEWALK



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS
DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597) AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V00119680U502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILLEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

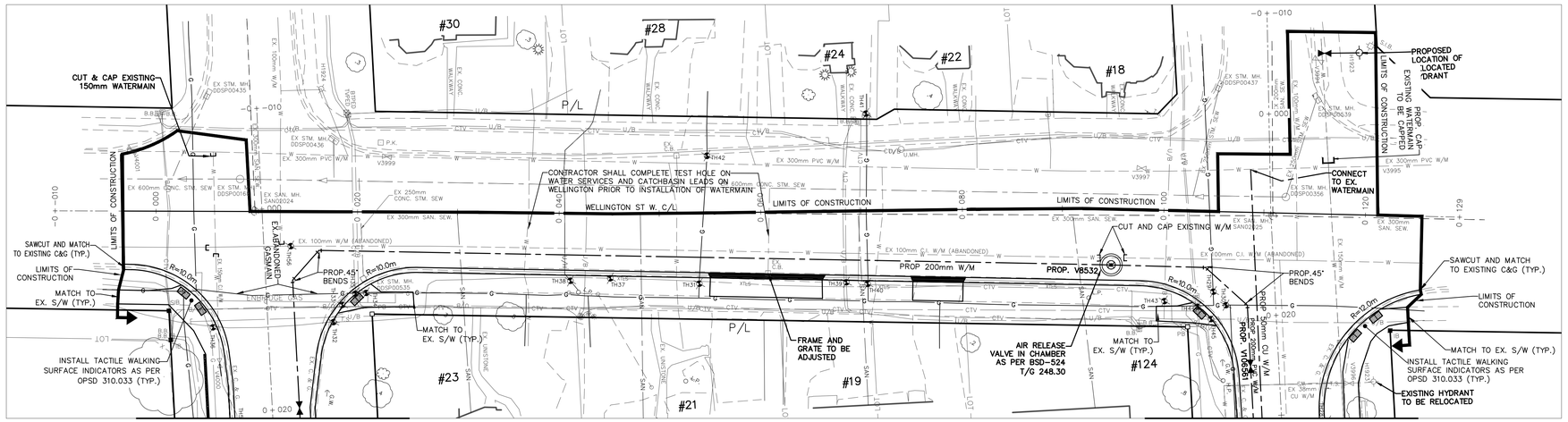
PLAN AND PROFILE – MAPLE AVENUE
STA. 0+140 TO STA. 0+275

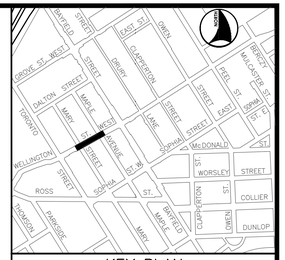
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO. 2024–108T
DESIGN	J.D.H.	DRAWN	J.D.H.	SHEET NO. PP6
REVIEWED	J.B.	DATE	2024.05.16	

5/17/2024 10:45 AM JASMINE GROSSE PROPOSED.DWG

WELLINGTON STREET WEST



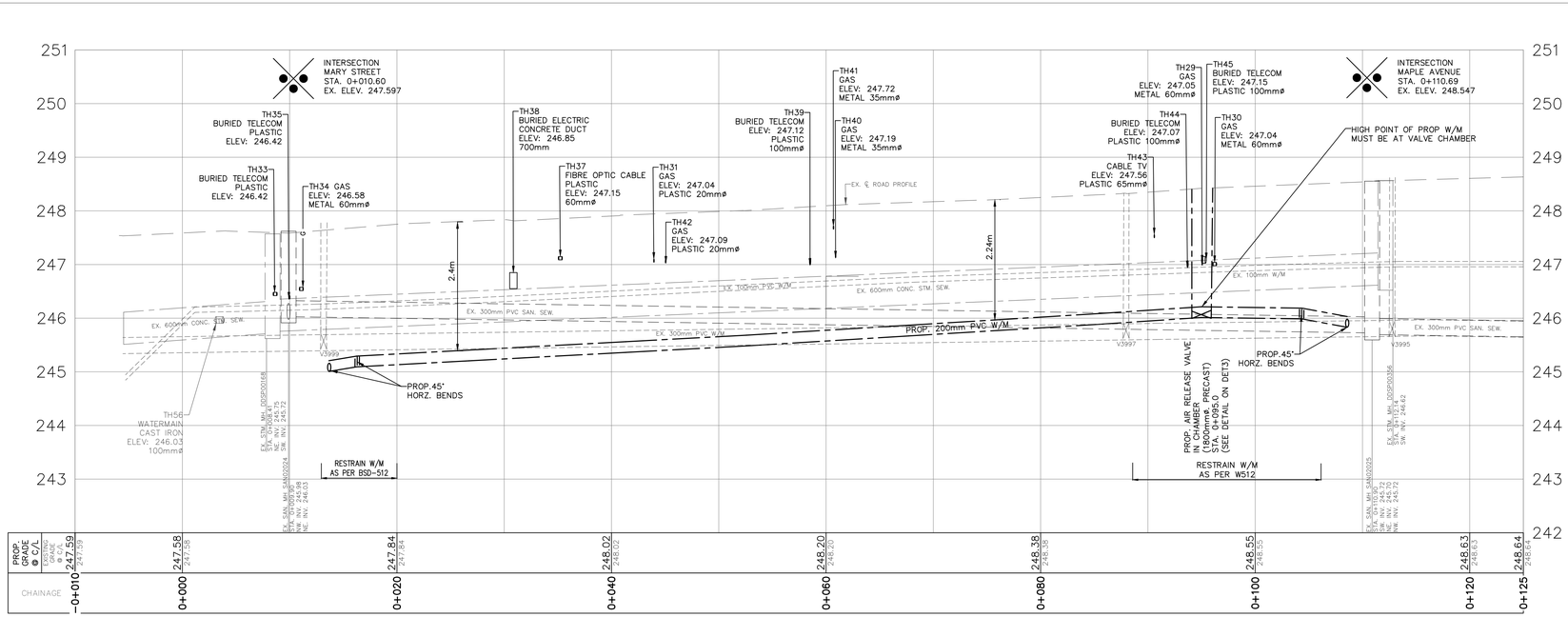


KEY PLAN
NOT TO SCALE

LEGEND

PROP. 100mm HI-40 STYROFOAM INSULATION OR APPROVED EQUIVALENT. 2.0 X 1.2m (TYP.)

PROP. DEPRESSED CURB AND DEPRESSED SIDEWALK



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS
DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597), AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V001196BU502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

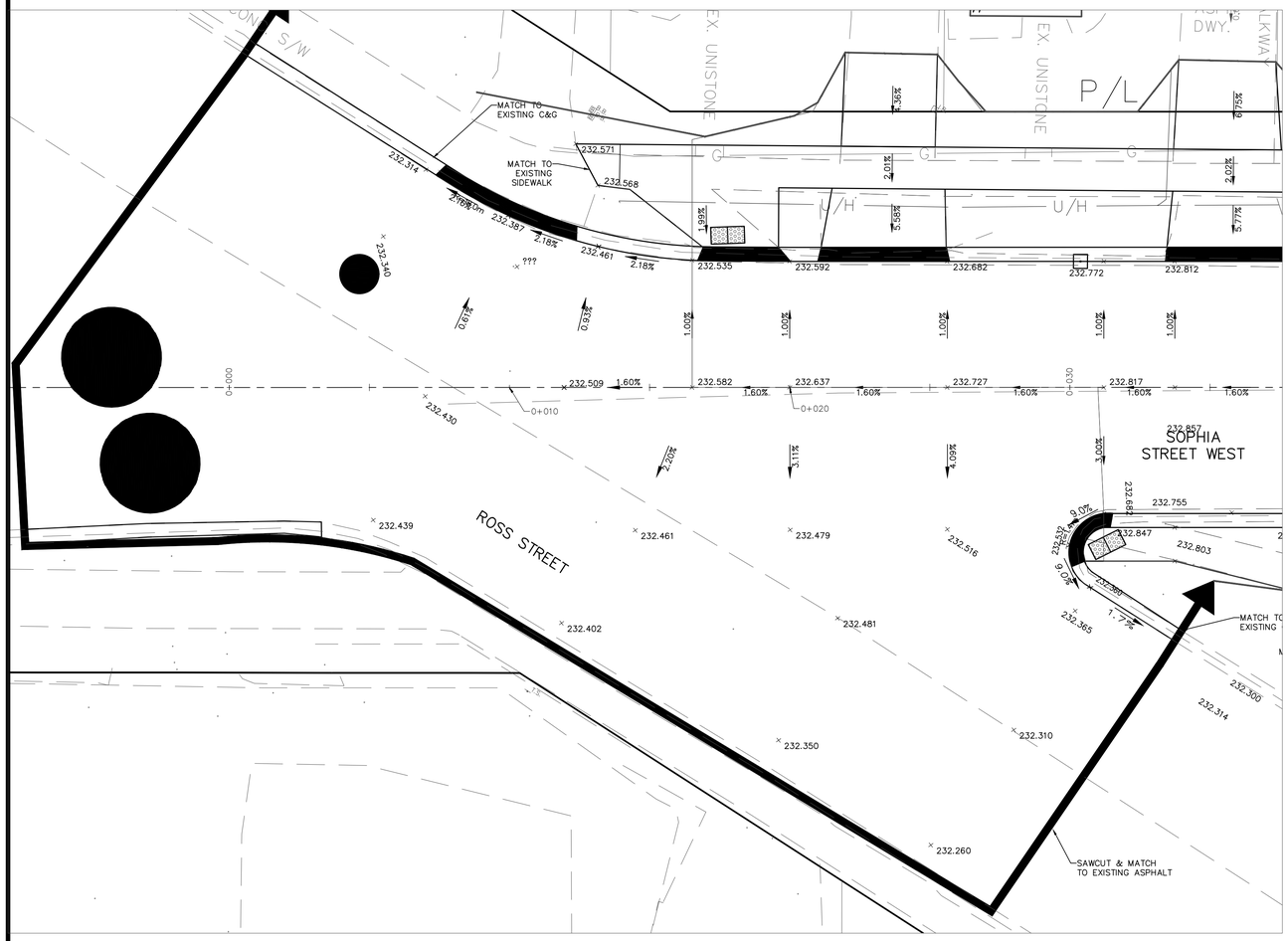
QUEEN'S PARK NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

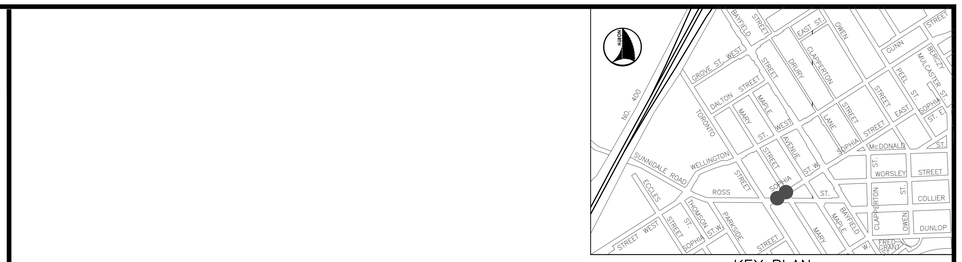
PLAN AND PROFILE – WELLINGTON ST WEST
STA. –0+010 TO STA. 0+129

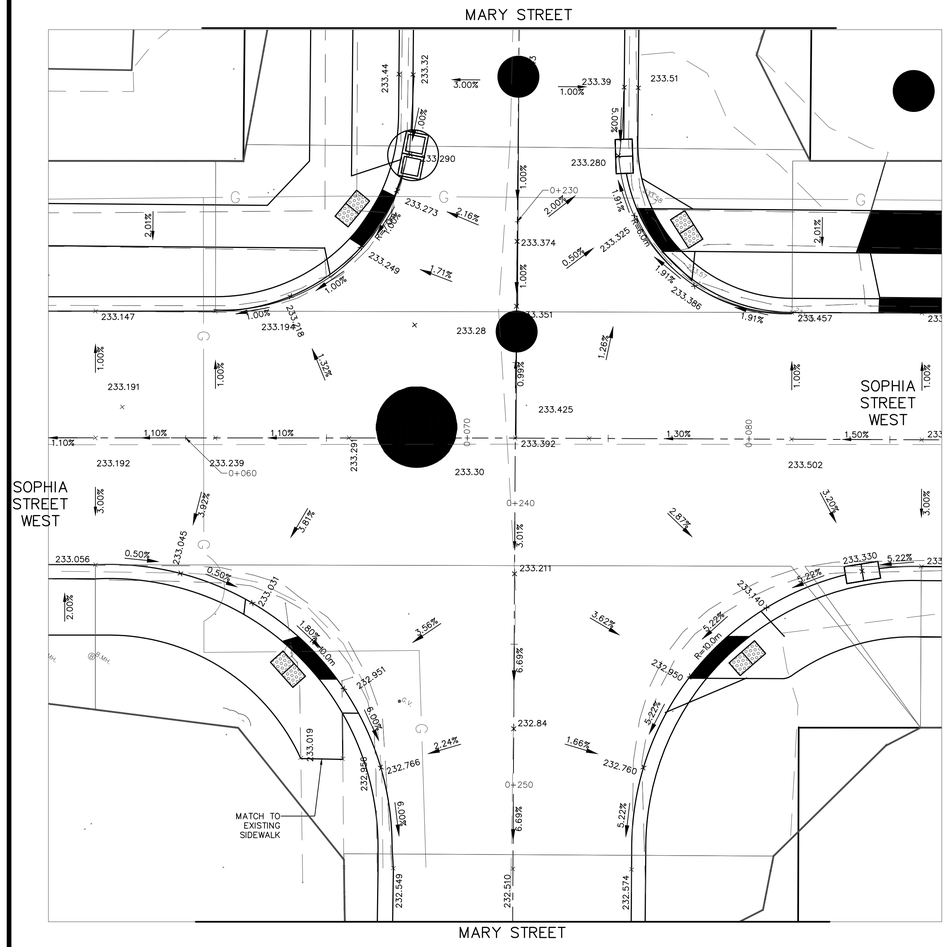
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO. 2024–108T
DESIGN	J.D.H.	DRAWN	J.D.H.	SHEET NO. PP7
REVIEWED	J.B.	DATE	2024.05.16	

5/17/2024 10:45 AM JASMINE GROSSE PROPOSED.DWG







GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS
DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 0101986046 3 (N=4916487.812, E=604671.597) AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

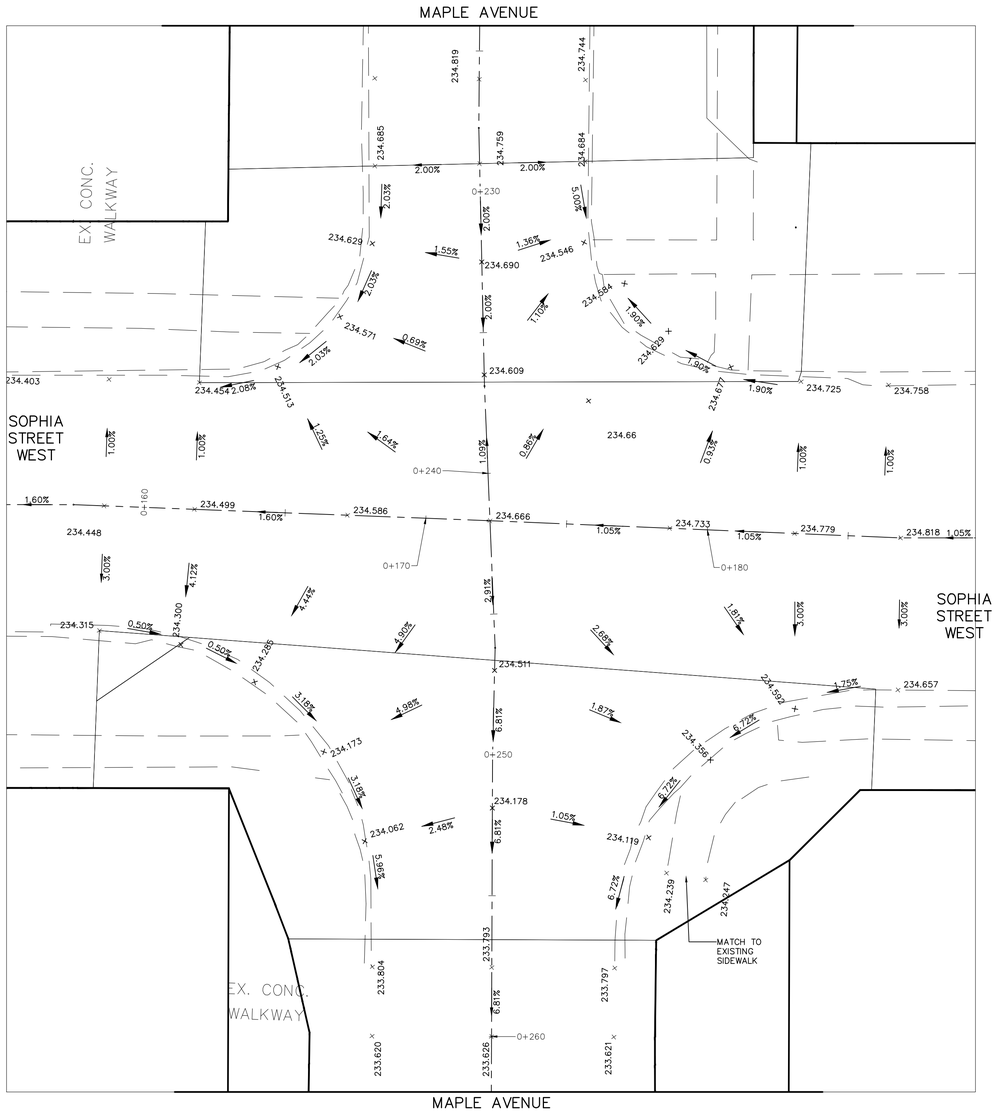
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

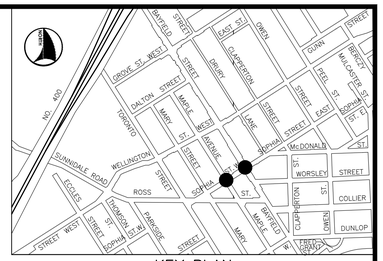
INTERSECTION GRADING
SOPHIA AT ROSS / SOPHIA AT MARY

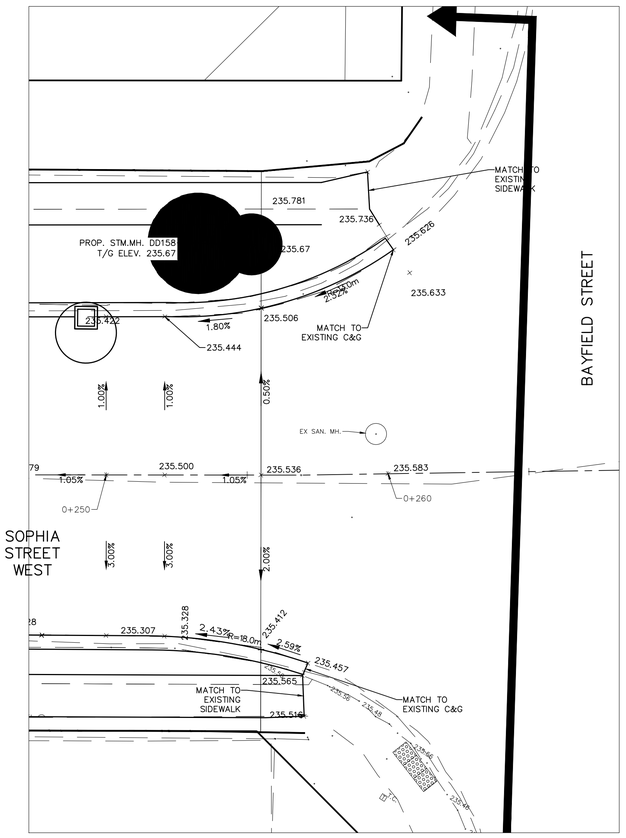
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:100	VERT.		CONTRACT NO. 2024–108T
DESIGN	J.D.H.	DRAWN	J.D.C.	SHEET NO. GP–1
REVIEWED	J.B.	DATE	2024.05.16	

5/21/2024 9:48 AM JASMINE GROSSE GRADING.DWG







GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597), AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL), UTM COORDINATES

BENCH MARK V001196BU502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

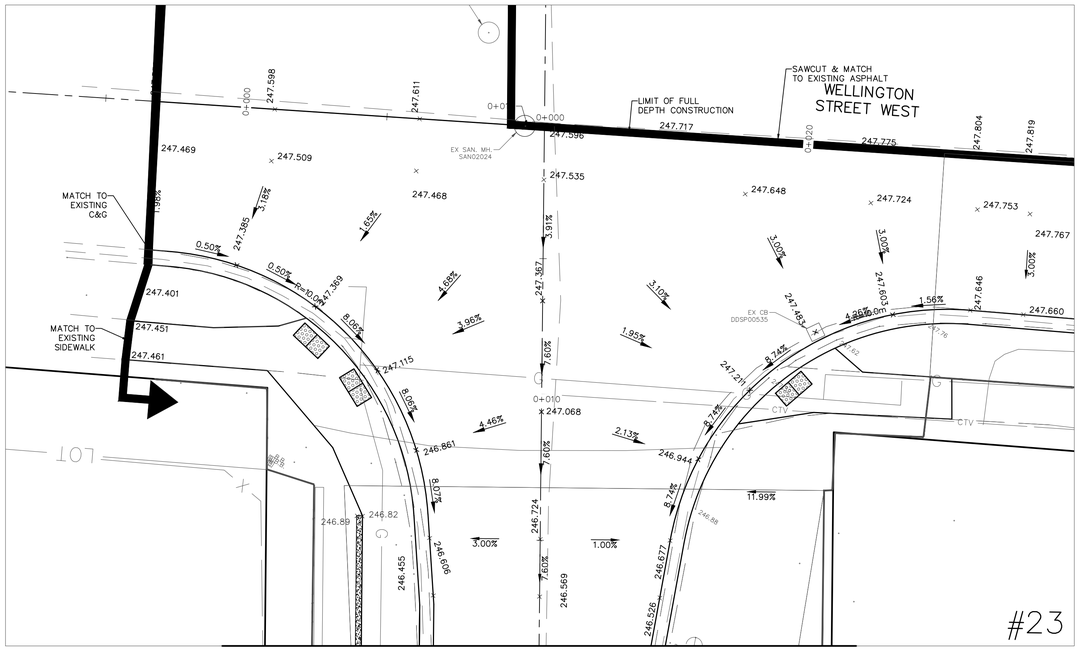
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

INTERSECTION GRADING
SOPHIA AT MAPLE / SOPHIA AT BAYFIELD

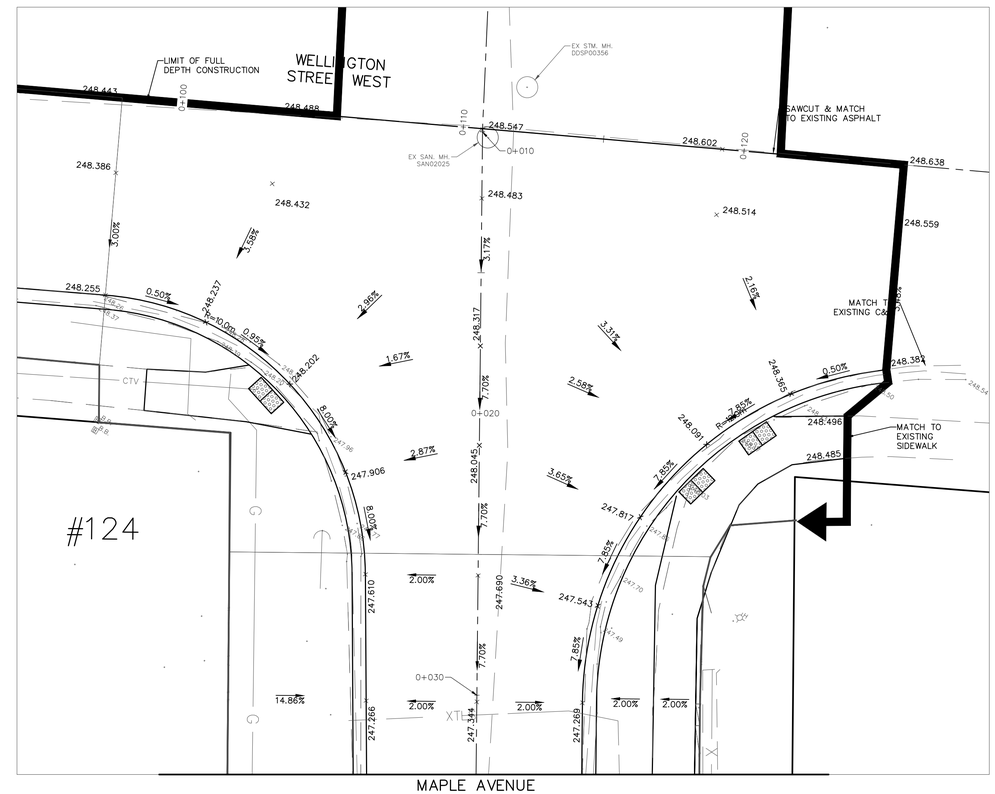
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:100	VERT.		CONTRACT NO. 2024–108T
DESIGN	J.D.H.	DRAWN	J.D.C.	SHEET NO. GP–2
REVIEWED	J.B.	DATE	2024.05.16	

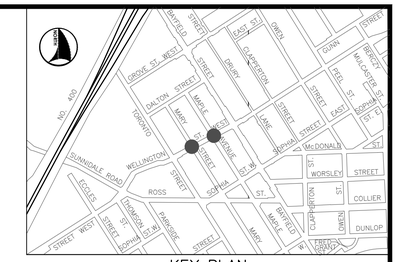
5/21/2024 9:48 AM JASMINE GROSSE GRADING.DWG



MARY STREET



MAPLE AVENUE



KEY PLAN
NOT TO SCALE

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGNAL). UTM COORDINATES

BENCH MARK V0011968U502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KIDEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

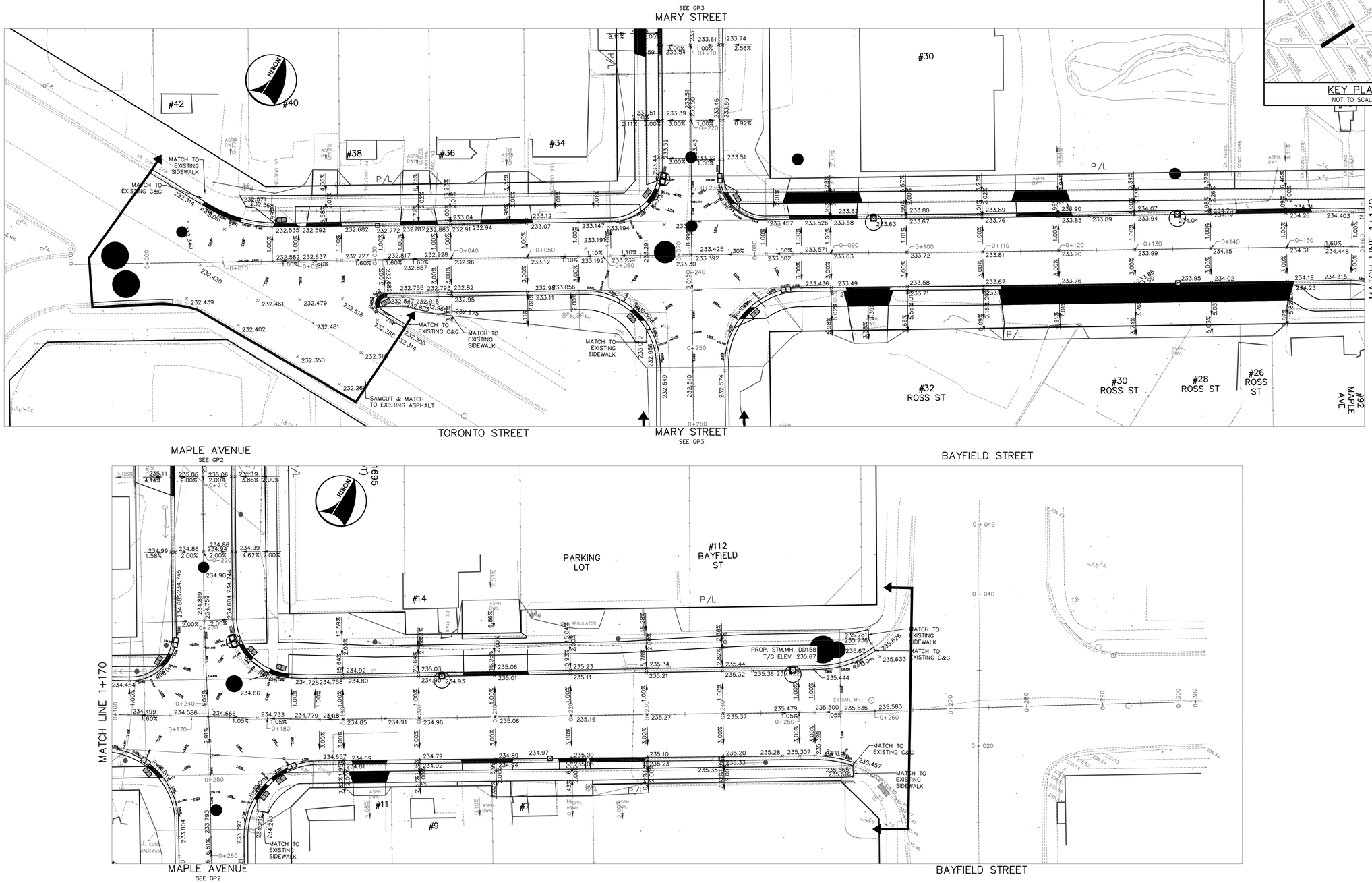
INTERSECTION GRADING
MARY AT WELLINGTON / MAPLE AT WELLINGTON

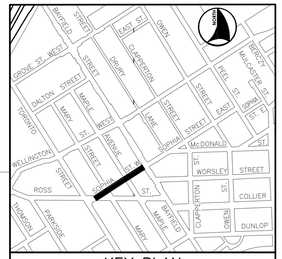
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR. 1:100	VERT.	CONTRACT NO.	2024–108T
DESIGN J.D.H.	DRAWN J.D.C.	SHEET NO.	GP–3
REVIEWED J.B.	DATE 2024.05.16		

5/21/2024 9:49 AM JASMINE GROSSE GRADING.DWG

SOPHIA STREET WEST





KEY PLAN
NOT TO SCALE

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V001196BU502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTIZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

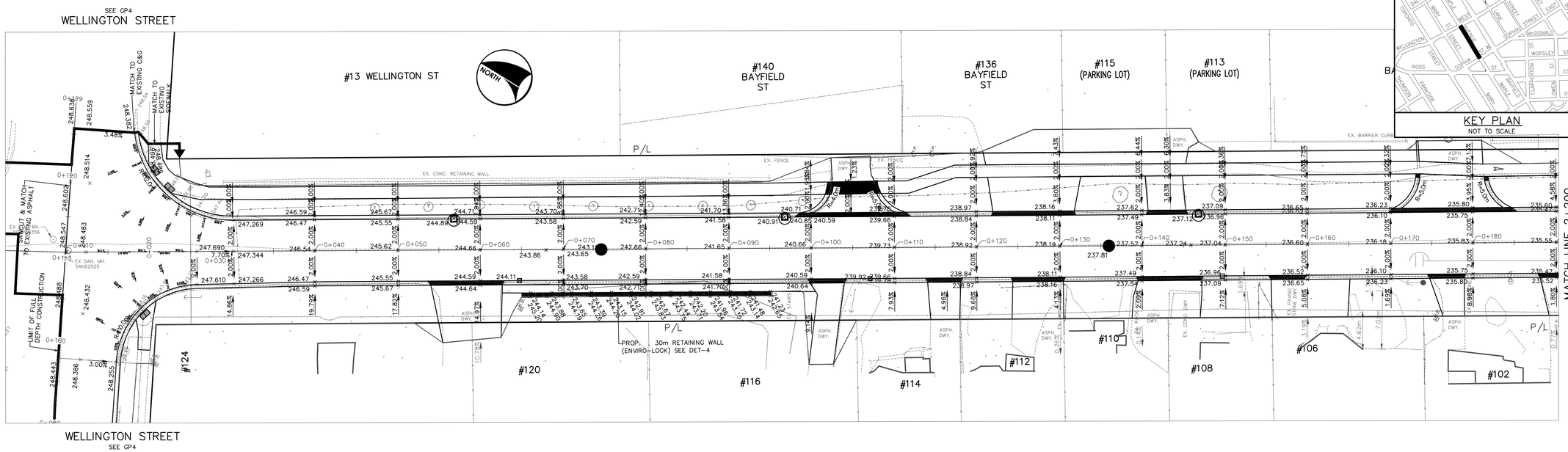
GRADING PLAN – SOPHIA STREET WEST
STA. –0+010 TO STA. 0+302

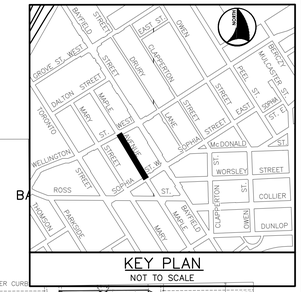
Barrie
ENGINEERING DEPARTMENT

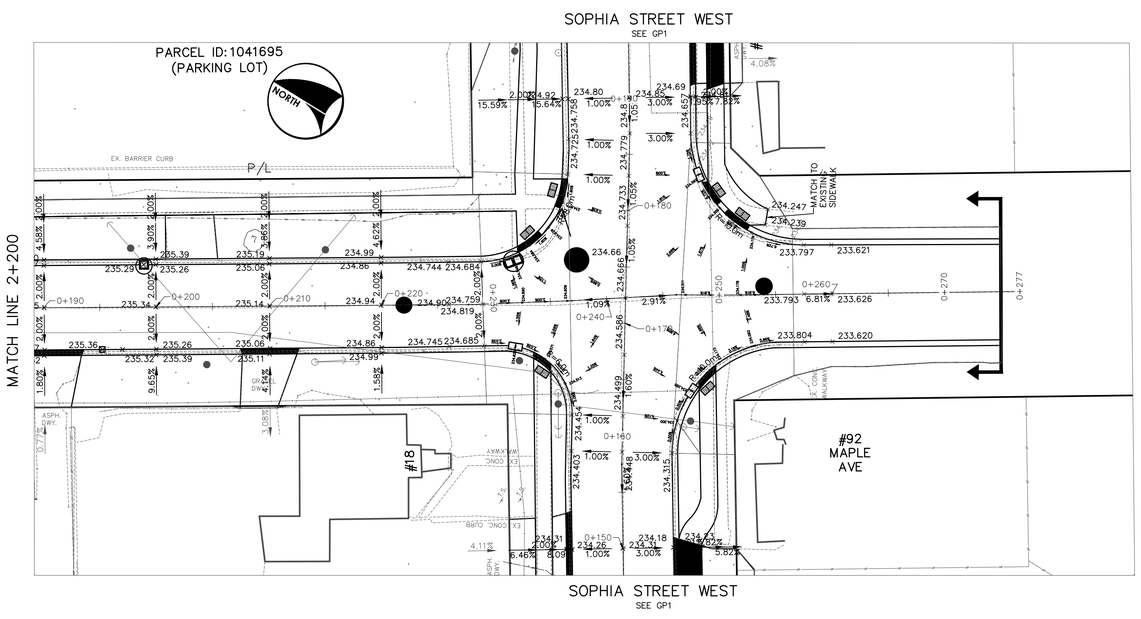
SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO.	2024–108T
DESIGN	D.M.	DRAWN	D.M.	SHEET NO.	GP4
REVIEWED	J.B.	DATE	2024.05.16		

5/21/2024 9:49 AM JASMINE GROSSE GRADING.DWG

MAPLE AVENUE







GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502

237.270 COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161850
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

GRADING PLAN – MAPLE AVENUE

STA. –0+010 TO STA. 0+277

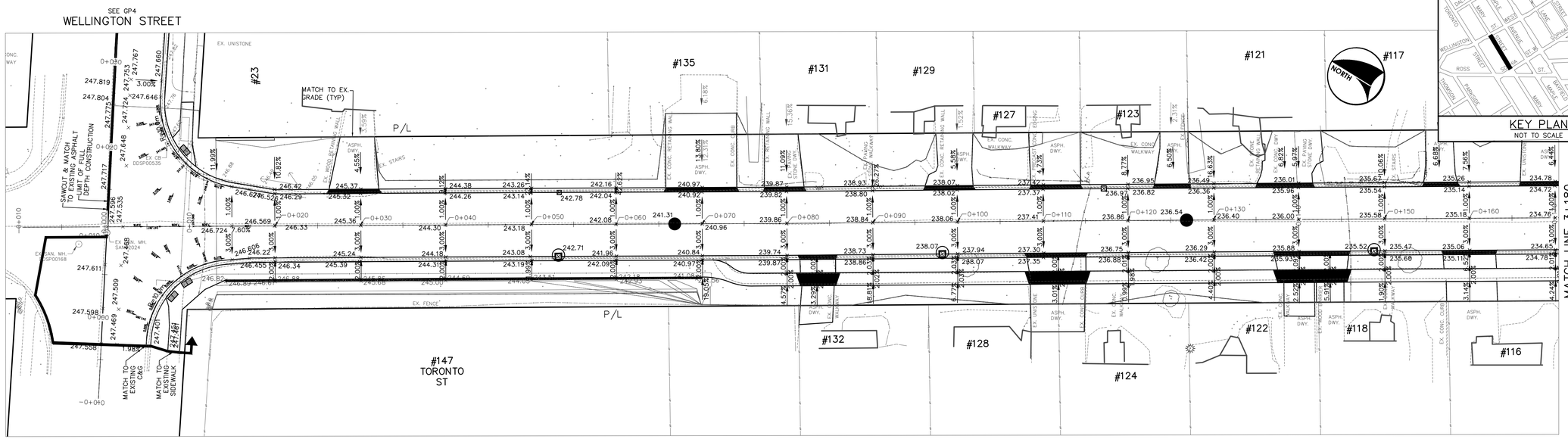
Barrie

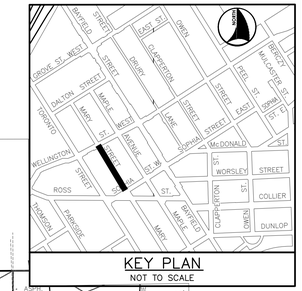
ENGINEERING DEPARTMENT

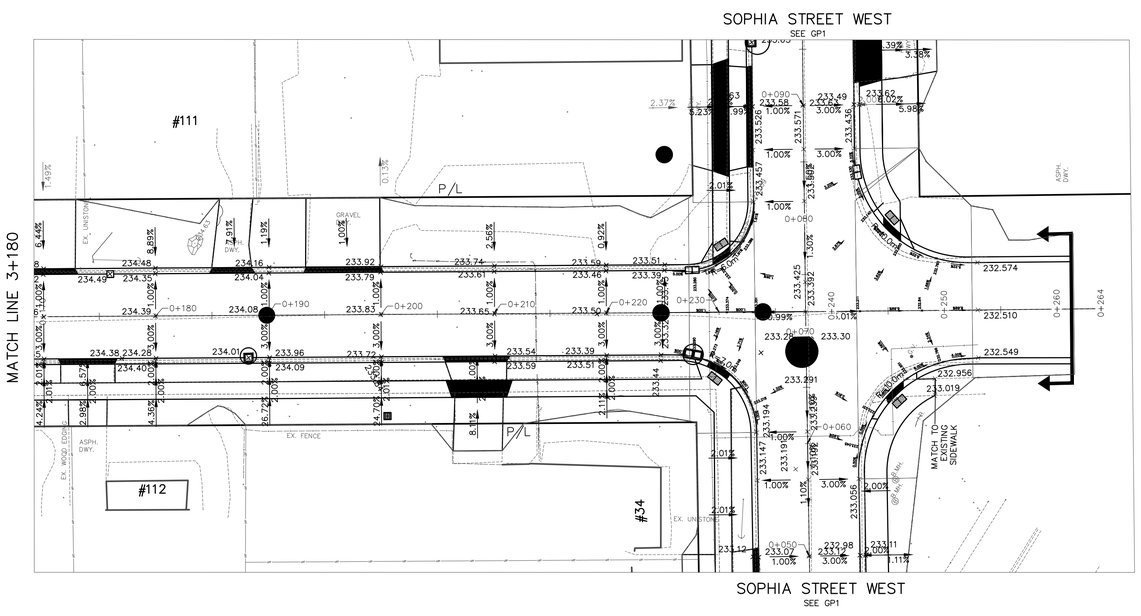
SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO.	2024–108T
DESIGN	D.M.	DRAWN	D.M.	SHEET NO.	GP5
REVIEWED	J.B.	DATE	2024.05.16		

5/21/2024 9:50 AM JASMINE GROSSE GRADING.DWG

MARY STREET







GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502

237.270 COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

GRADING PLAN – MARY STREET

STA. –0+010 TO STA. 0+264

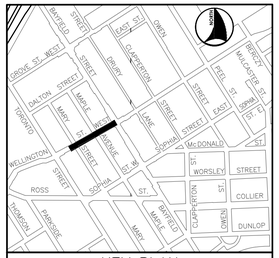
Barrie

ENGINEERING DEPARTMENT

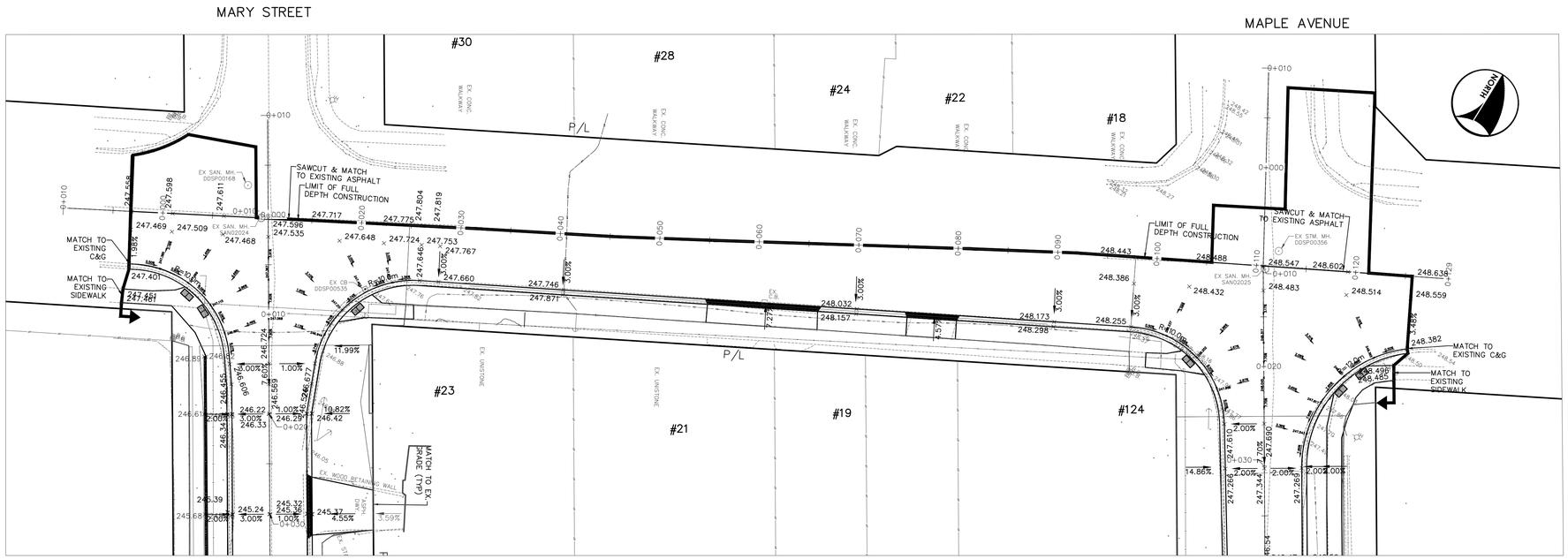
SCALE HOR. 1:250	VERT. 1:50	CONTRACT NO. 2024–108T	
DESIGN D.M.	DRAWN D.M.	SHEET NO. GP6	
REVIEWED J.B.	DATE 2024.05.16		

5/21/2024 9:50 AM JASMINE GROSSE GRADING.DWG

WELLINGTON STREET WEST



KEY PLAN
NOT TO SCALE



MARY STREET
SEE GP3

MAPLE AVENUE
SEE GP2

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773; E=603662.430) AND 01019860463 (N=4916487.812; E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KIDEY
100161850
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

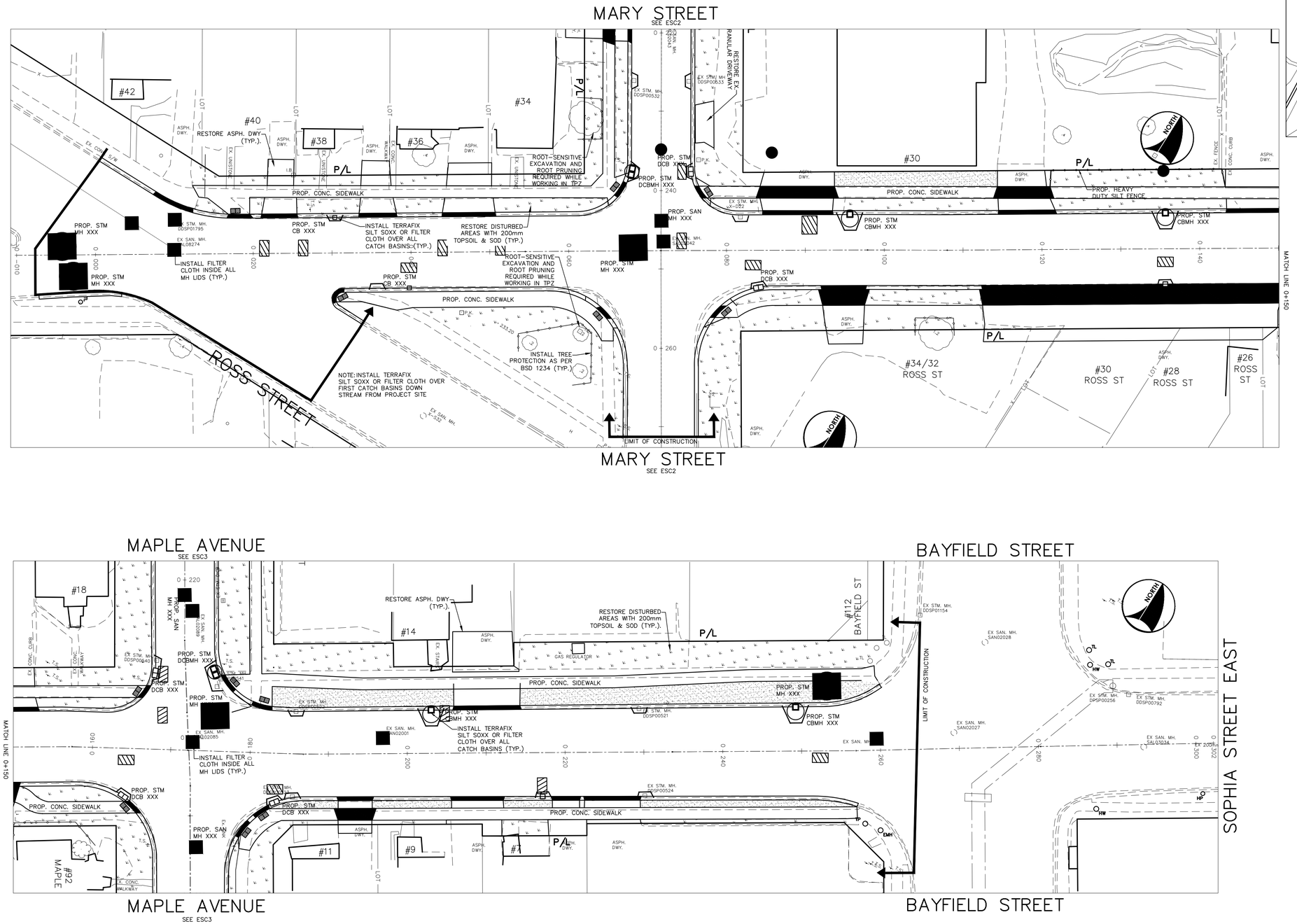
GRADING PLAN – WELLINGTON STREET WEST
STA. 0+000 TO STA. 0+129

Barrie
ENGINEERING DEPARTMENT

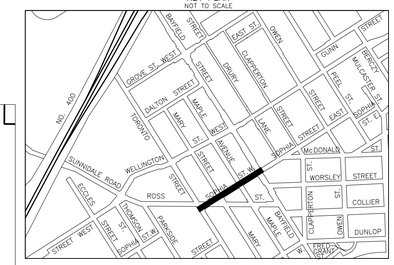
SCALE HOR.	1:250	VERT.	1:50	CONTRACT NO. 2024–108T
DESIGN	D.M.	DRAWN	D.M.	SHEET NO. GP7
REVIEWED	J.B.	DATE	2024.05.16	

5/21/2024 9:50 AM JASMINE GROSSE GRADING.DWG

SOPHIA STREET WEST



KEY PLAN
NOT TO SCALE



LEGEND

- CLEARING AND GRUBBING
- TOPSOIL AND SOD RESTORATION
- ASPHALT RESTORATION
- TREE PROTECTION FENCING
- TPZ — TREE PROTECTION ZONE (NOTE: AS PER ARBORIST REPORT)

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V00119680U502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KIRKEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

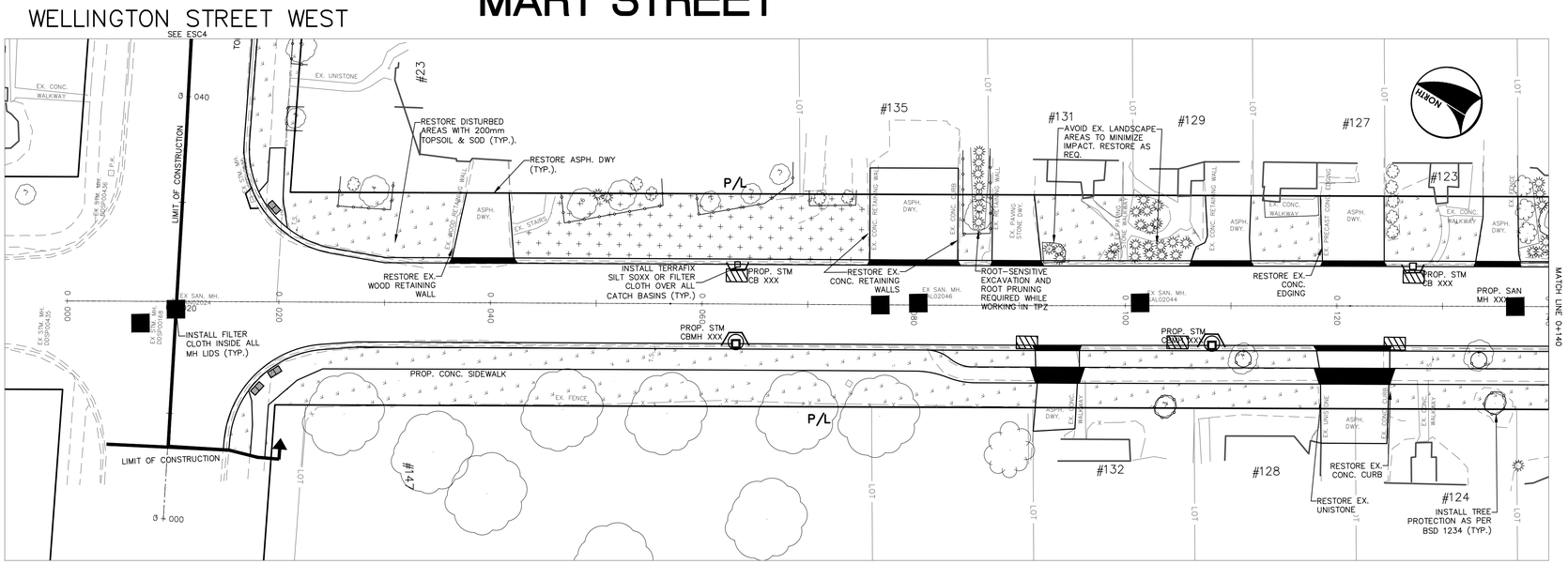
TREE REMOVAL/PROTECTION, ESC AND RESTORATION PLAN – SOPHIA STREET WEST
STA –0+010 TO STA 0+312

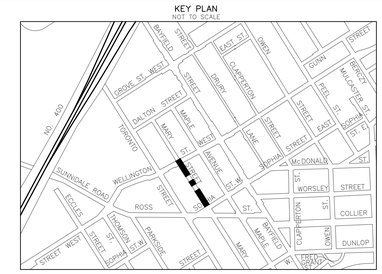
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR.	1:250	VERT.	---	CONTRACT NO. 2024–108T
DESIGN	J.G./M.C.	DRAWN	J.G/M.C.	SHEET NO. ESC1
REVIEWED	J.B.	DATE	2024.05.16	

5/21/2024 10:02 AM JASMINE GROSSE ESC-RESTORATION PLAN.DWG

MARY STREET

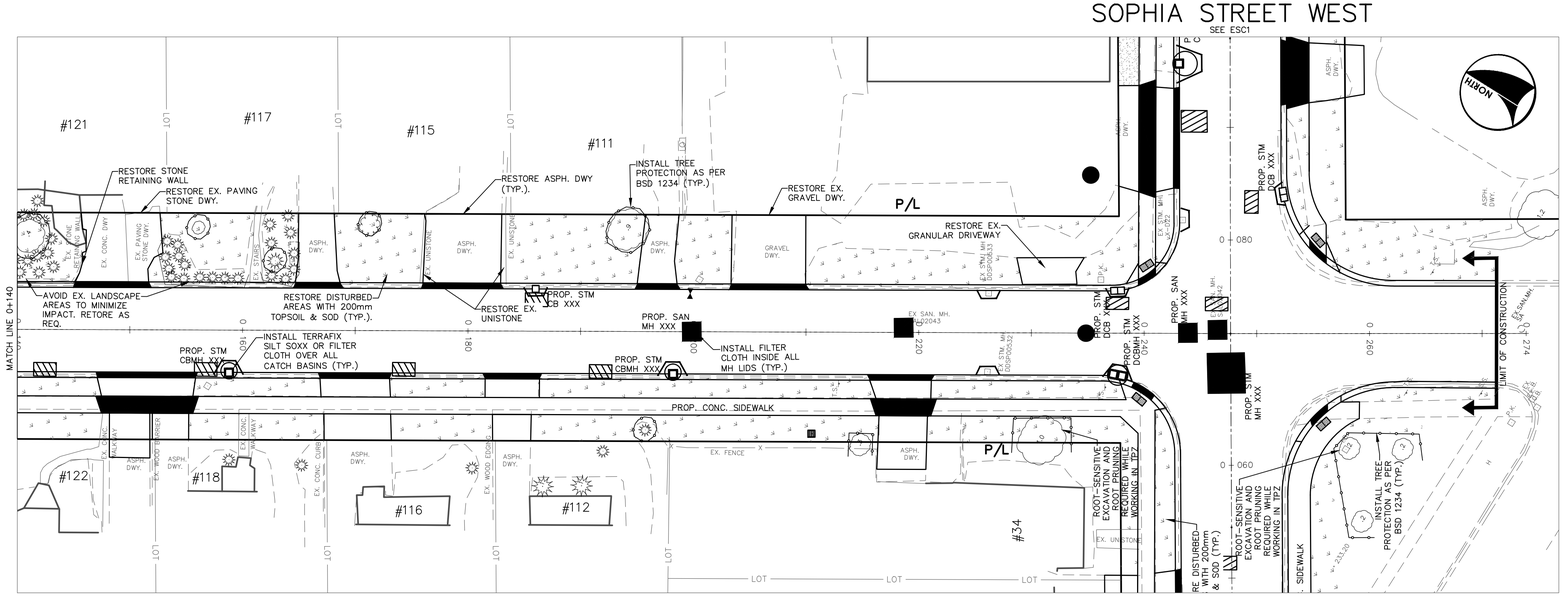




LEGEND

- CLEARING AND GRUBBING
- TOPSOIL AND SOD RESTORATION
- ASPHALT RESTORATION
- TREE PROTECTION FENCING
- TPZ — TREE PROTECTION ZONE (NOTE: AS PER ARBORIST REPORT)

SOPHIA STREET WEST



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597), AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGNAL), UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

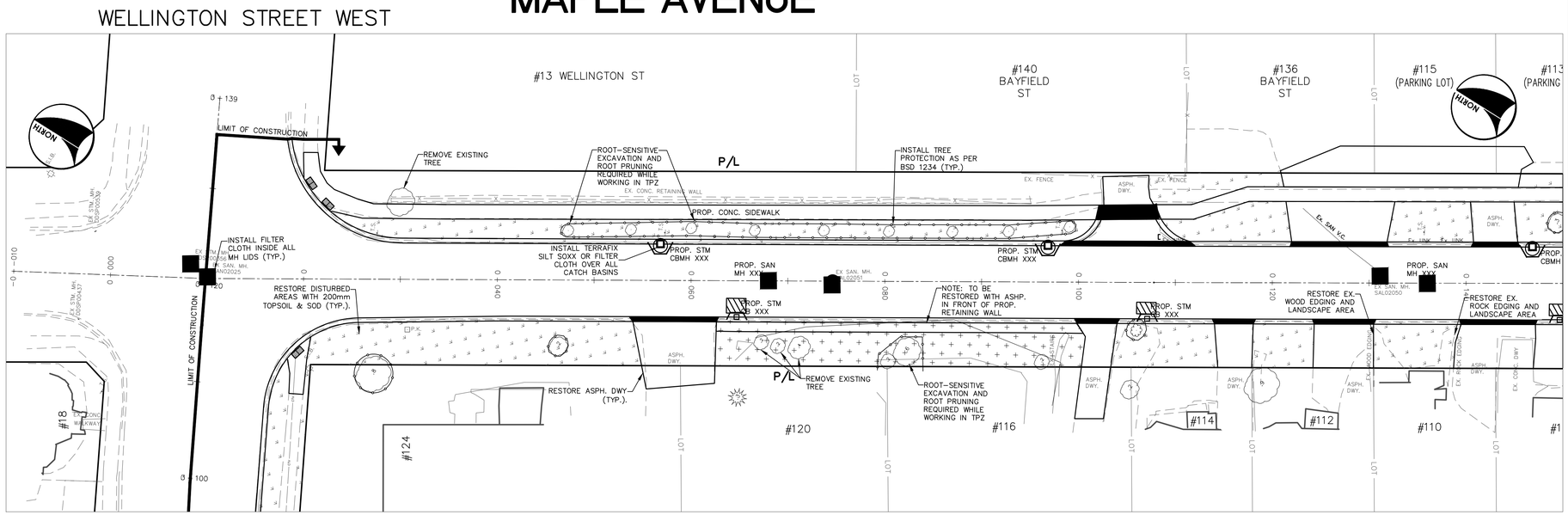
TREE REMOVAL/PROTECTION, ESC AND RESTORATION PLAN – MARY STREET
STA 0+000 TO STA 0+274

Barrie
INFRASTRUCTURE DEPARTMENT

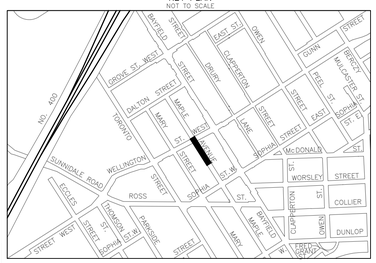
SCALE HOR. 1:250	VERT. ---	CONTRACT NO.	2024–108T
DESIGN J.G./M.C.	DRAWN J.G./M.C.	SHEET NO.	ESC2
REVIEWED J.B.	DATE 2024.05.16		

5/21/2024 10:02 AM JASMINE GROSSE ESC-RESTORATION PLAN.DWG

MAPLE AVENUE



KEY PLAN
NOT TO SCALE

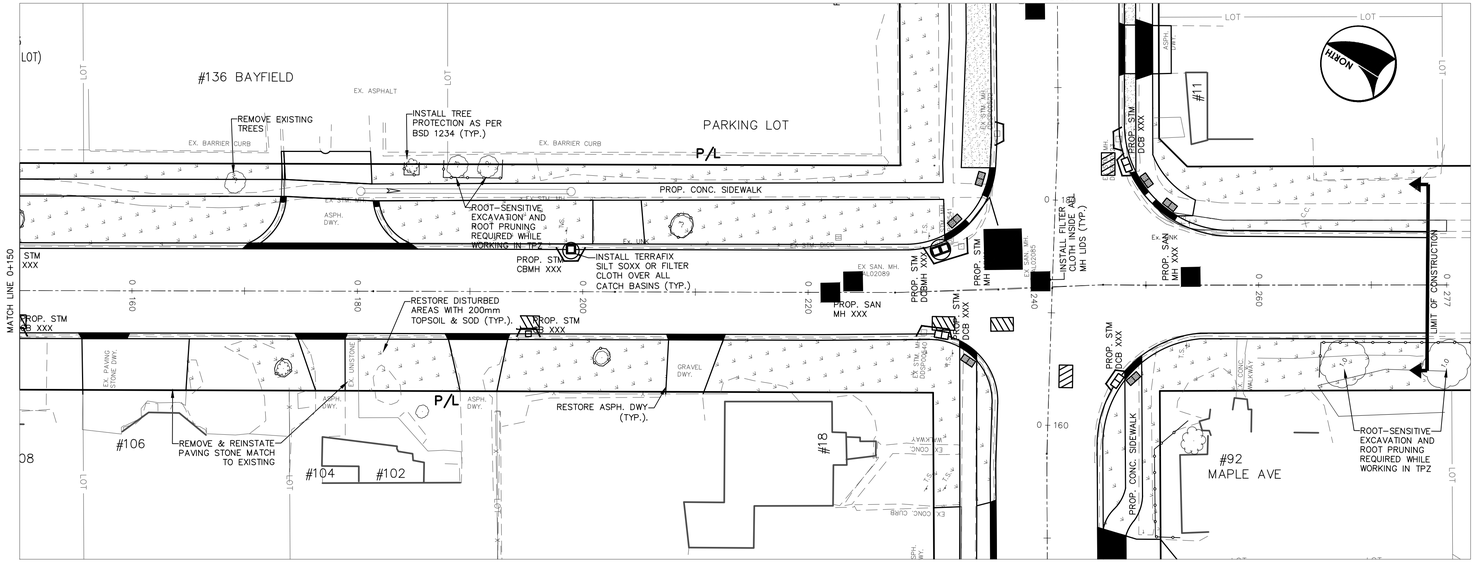


LEGEND

- CLEARING AND GRUBBING
- TOPSOIL AND SOD RESTORATION
- ASPHALT RESTORATION
- TREE PROTECTION FENCING
- TPZ — TREE PROTECTION ZONE (NOTE: AS PER ARBORIST REPORT)

SOPHIA STREET WEST

SEE ESC1



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V001196BU502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILLEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

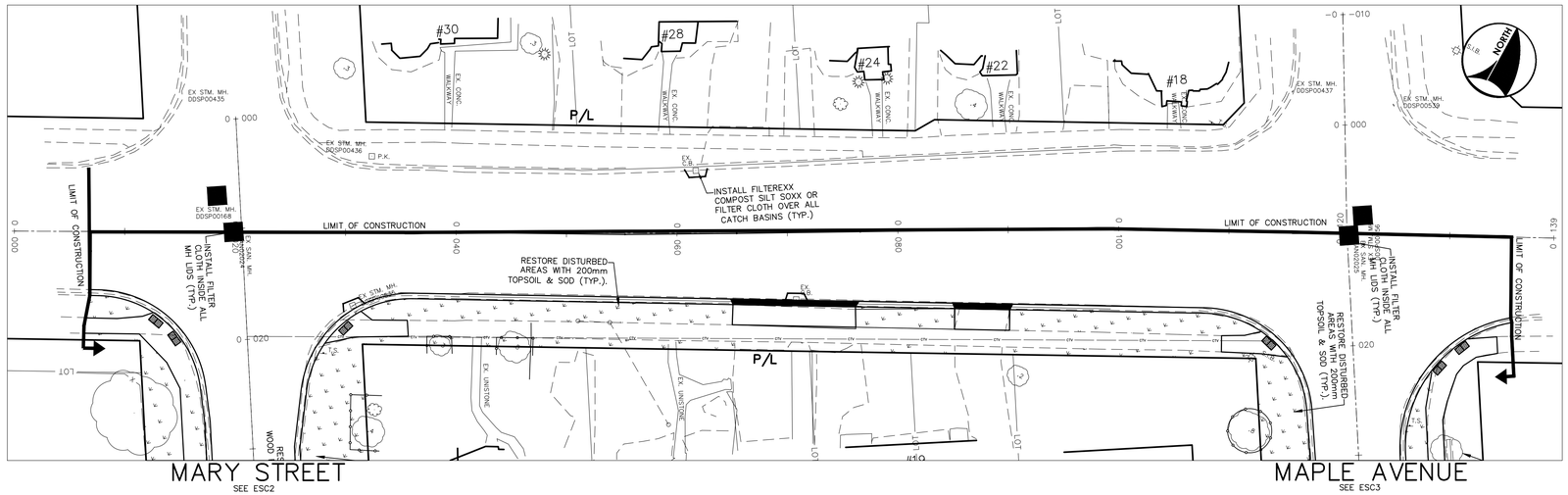
TREE REMOVAL/RESTORATION, ESC AND RESTORATION PLAN – MAPLE AVENUE
STA. 0+000 TO STA. 0+287

Barrie
INFRASTRUCTURE DEPARTMENT

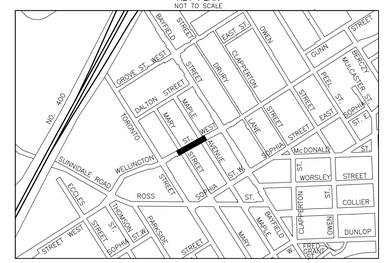
SCALE HOR. 1:250	VERT.		CONTRACT NO. 2024–108T
DESIGN J.G./M.C.	DRAWN J.G./M.C.		SHEET NO. ESC3
REVIEWED J.B.	DATE 2024.05.16		

5/21/2024 10:03 AM JASMINE GROSSE ESC-RESTORATION PLAN.DWG

WELLINGTON STREET WEST



KEY PLAN
NOT TO SCALE



LEGEND

	CLEARING AND GRUBBING
	TOPSOIL AND SOD RESTORATION
	ASPHALT RESTORATION
	TREE PROTECTION FENCING
TPZ	TREE PROTECTION ZONE (NOTE: AS PER ARBORIST REPORT)

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILLEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

TREE REMOVAL/PROTECTION, ESC AND RESTORATION PLAN– WELLINGTON ST WEST

STA. 0+000 TO STA. 0+139

Barrie

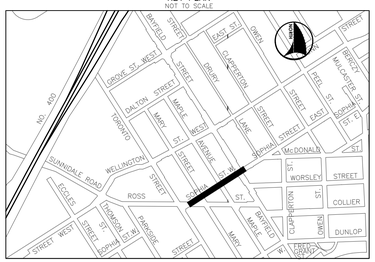
INFRASTRUCTURE DEPARTMENT

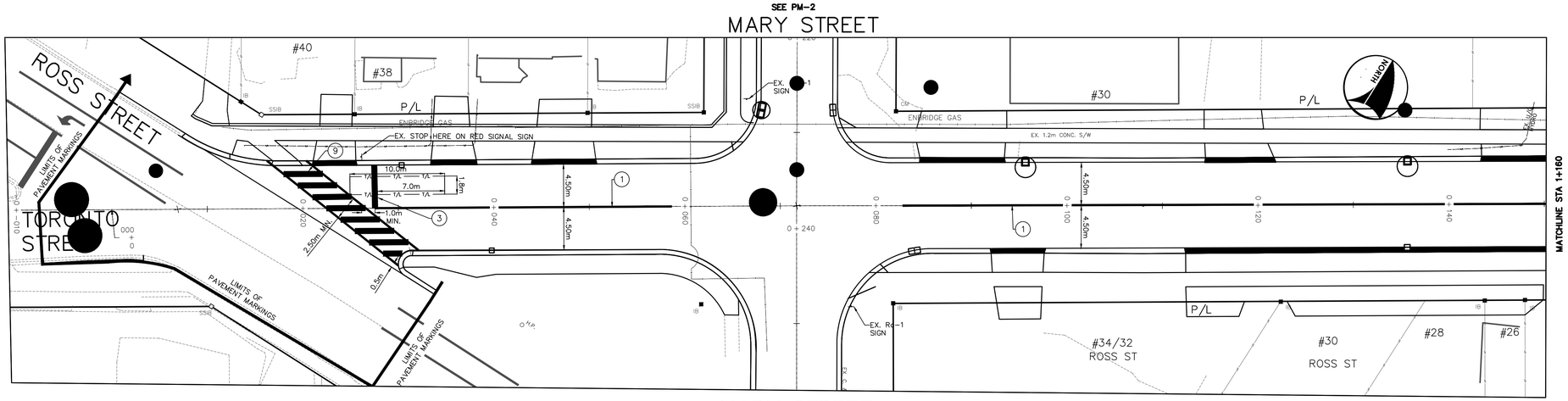
SCALE HOR.	1:250	VERT.	---	CONTRACT NO. 2024–108T
DESIGN	J.G./M.C.	DRAWN	J.G./M.C	
REVIEWED	J.B.	DATE	2024.05.16	SHEET NO. ESC4

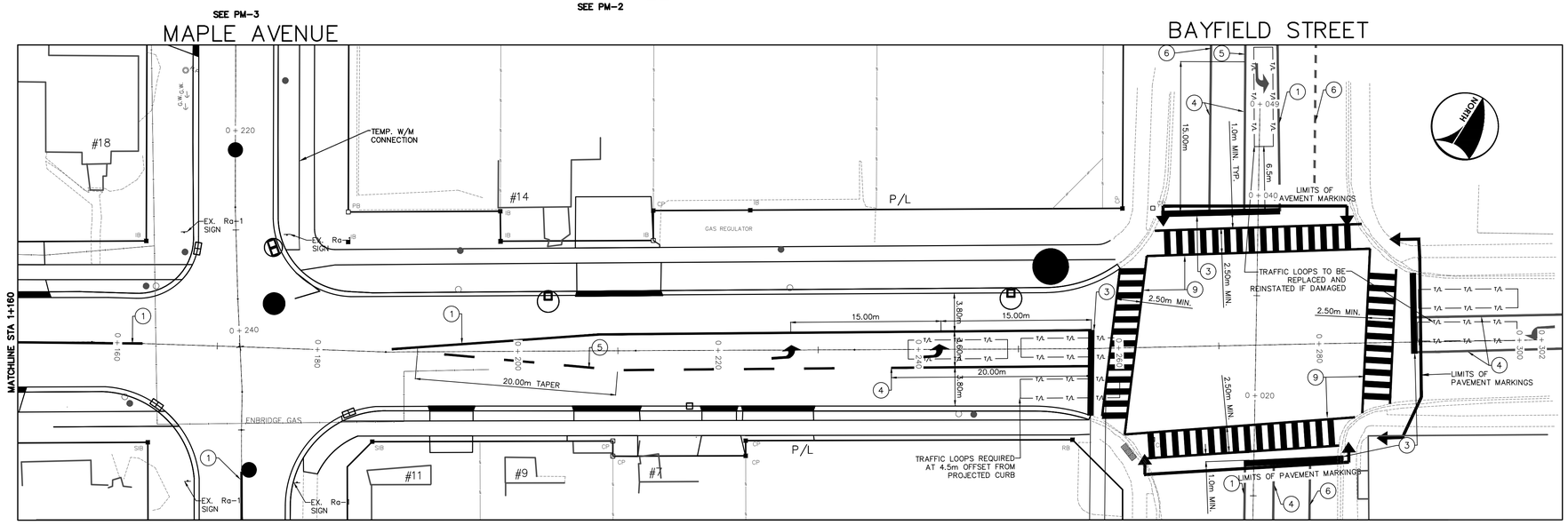
5/21/2024 10:03 AM JASMINE GROSSE ESC-RESTORATION PLAN.DWG

SOPHIA STREET WEST

KEY PLAN
NOT TO SCALE







ALL PAVEMENT MARKINGS TO BE DURABLE

PROPOSED PAVEMENT MARKINGS SHOWN IN BLACK LINETYPE

EXISTING PAVEMENT MARKINGS NOT TO BE PAINTED SHOWN IN GREY LINETYPE

ANY EXISTING PAVEMENT MARKINGS DAMAGED BY ASPHALT TRACKING WILL BE REPAINTED

DURABLE PAVEMENT MARKINGS LEGEND

NAME OF LINE	DIMENSION	COLOUR	NAME OF LINE	DIMENSION	COLOUR
1 SOLID LINE	100mm	YELLOW	8 BICYCLE LANE BROKEN LINE	1m–1m–1m 100mm	WHITE
2 SOLID CROSSWALK LINE	100mm	WHITE	9 CROSSWALKS WITH ZEBRA LINES	SEE DET1	WHITE
3 SOLID STOP BAR	600mm	WHITE	BICYCLE LANE SYMBOL	2.0m X 1.0m	WHITE
4 SOLID LINE	100mm	WHITE	LANE MARKING SYMBOL	3.0m X 1.35m	WHITE
5 BROKEN LINE	3m–3m–3m, 100mm	WHITE	RESERVED LANE SYMBOL	2.0m X 1.0m	WHITE
6 BROKEN LINE	3m–6m–3m, 100mm	WHITE	SHARROWS	1.0m X 1.0m	WHITE
7 BROKEN LINE	3m–6m–3m, 100mm	YELLOW			

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS
DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

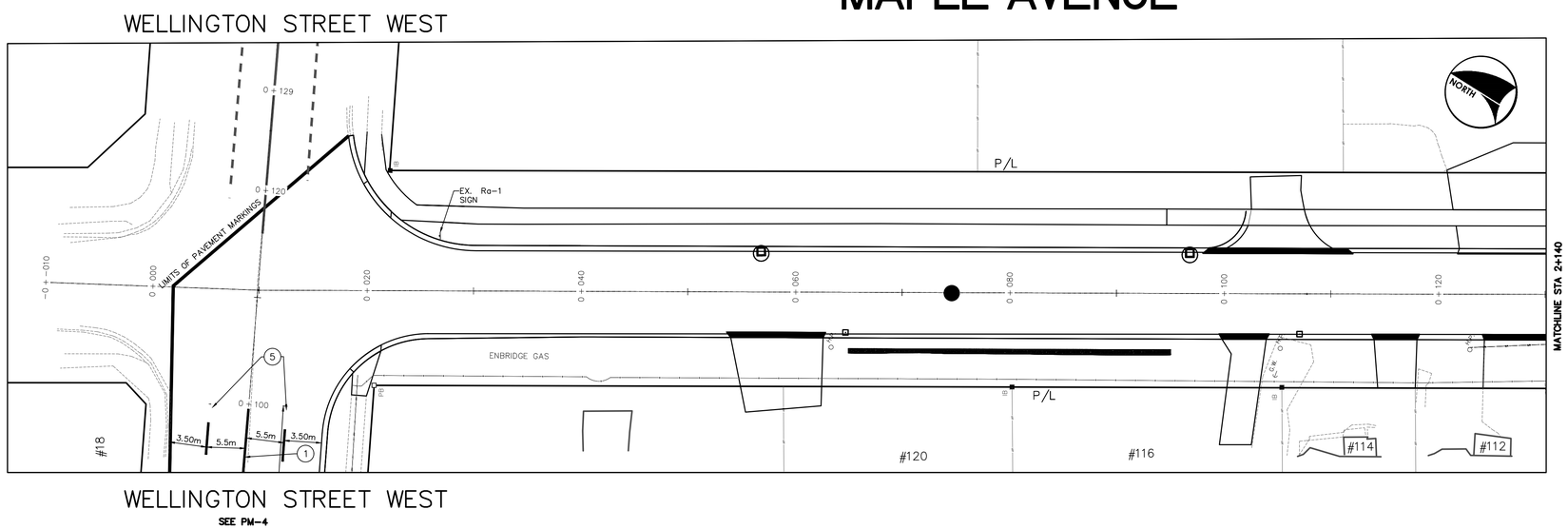
PAVEMENT MARKINGS – SOPHIA STREET WEST
STA. –0+010 TO STA. 0+302

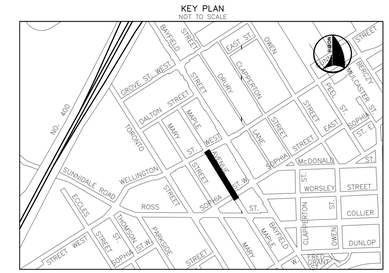
Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR. 1:250	VERT.		CONTRACT NO. 2024–108T
DESIGN J.D.H.	DRAWN Z.Z.		SHEET NO. PM–1
REVIEWED J.B.	DATE 2024.05.16		

5/21/2024 11:07 AM JASMINE GROSSE PAVE MARK.DWG

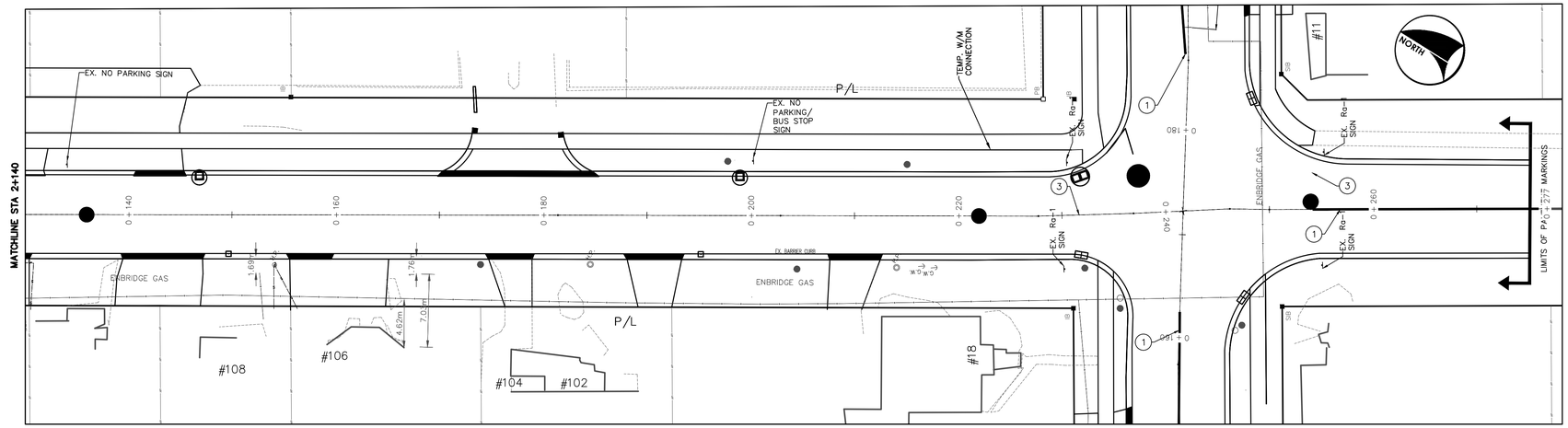
MAPLE AVENUE





SEE PM-1

SOPHIA STREET WEST



ALL PAVEMENT MARKINGS TO BE DURABLE

PROPOSED PAVEMENT MARKINGS SHOWN IN BLACK LINETYPE

EXISTING PAVEMENT MARKINGS NOT TO BE PAINTED SHOWN IN GREY LINETYPE

DURABLE PAVEMENT MARKINGS LEGEND

	NAME OF LINE	DIMENSION	COLOUR		NAME OF LINE	DIMENSION	COLOUR
1	SOLID LINE	100mm	YELLOW	8	BICYCLE LANE BROKEN LINE	1m–1m–1m 100mm	WHITE
2	SOLID CROSSWALK LINE	100mm	WHITE	9	CROSSWALKS WITH ZEBRA LINES	SEE DET1	WHITE
3	SOLID STOP BAR	600mm	WHITE		BICYCLE LANE SYMBOL	2.0m X 1.0m	WHITE
4	SOLID LINE	100mm	WHITE		LANE MARKING SYMBOL	3.0m X 1.35m	WHITE
5	BROKEN LINE	3m–3m–3m, 100mm,	WHITE		RESERVED LANE SYMBOL	2.0m X 1.0m	WHITE
6	BROKEN LINE	3m–6m–3m, 100mm	WHITE		SHARROWS	1.0m X 1.0m	WHITE
7	BROKEN LINE	3m–6m–3m, 100mm	YELLOW				

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

PAVEMENT MARKINGS – MAPLE AVENUE

STA. –0+010 TO STA. 0+277

Barrie

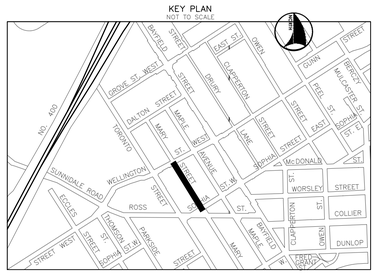
INFRASTRUCTURE DEPARTMENT

SCALE HOR. 1:250	VERT.	CONTRACT NO.	2024–108T
DESIGN J.D.H.	DRAWN Z.Z.	SHEET NO.	PM–2
REVIEWED J.B.	DATE 2024.05.16		

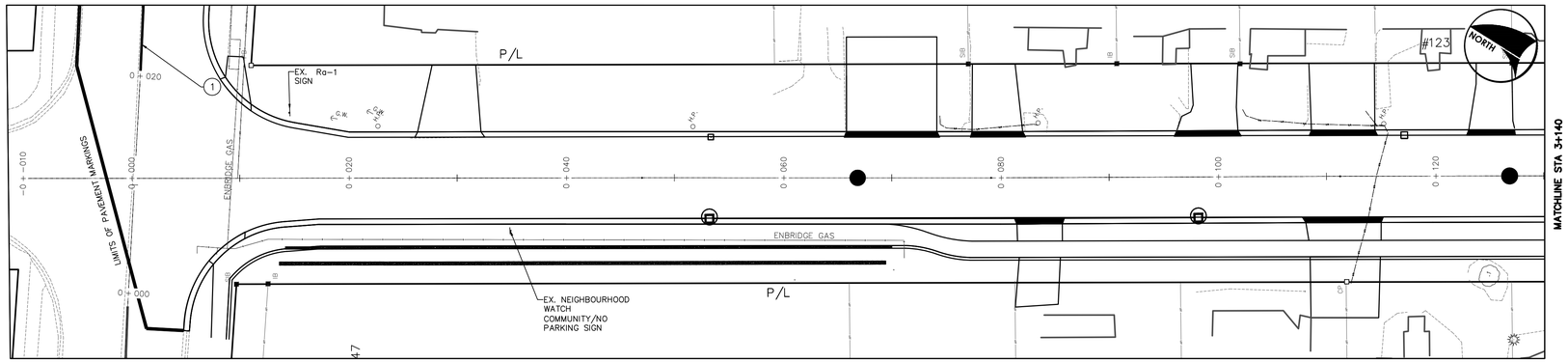
5/21/2024 11:07 AM JASMINE GROSSE PAKE MARK.DWG

MARY STREET

KEY PLAN
NOT TO SCALE

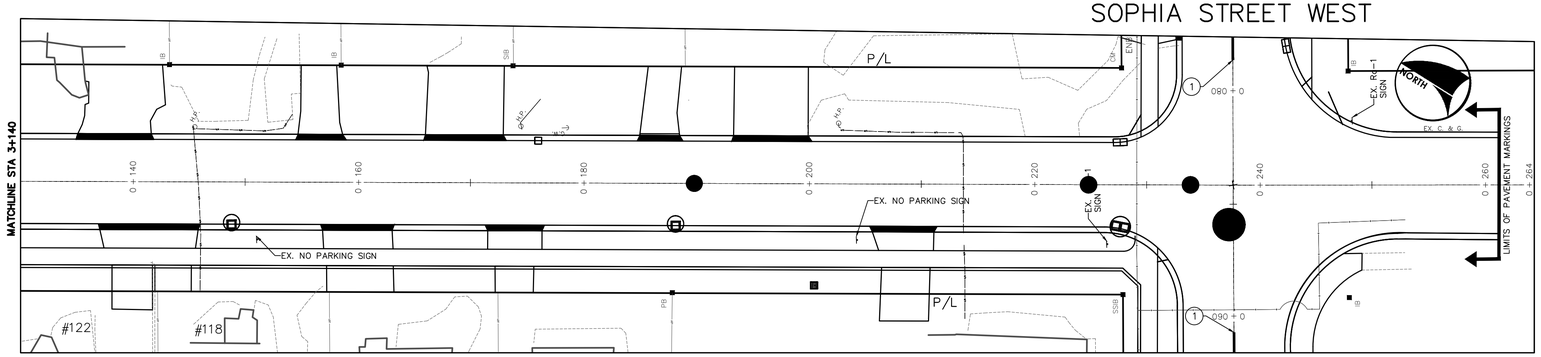


WELLINGTON STREET WEST



WELLINGTON STREET WEST

SOPHIA STREET WEST



SOPHIA STREET WEST

ALL PAVEMENT MARKINGS TO BE DURABLE

PROPOSED PAVEMENT MARKINGS SHOWN IN BLACK LINETYPE

EXISTING PAVEMENT MARKINGS NOT TO BE PAINTED SHOWN IN GREY LINETYPE

DURABLE PAVEMENT MARKINGS LEGEND

	NAME OF LINE	DIMENSION	COLOUR		NAME OF LINE	DIMENSION	COLOUR
1	SOLID LINE	100mm	YELLOW	8	BICYCLE LANE BROKEN LINE	1m–1m–1m 100mm	WHITE
2	SOLID CROSSWALK LINE	100mm	WHITE	9	CROSSWALKS WITH ZEBRA LINES	SEE DET1	WHITE
3	SOLID STOP BAR	600mm	WHITE		BICYCLE LANE SYMBOL	2.0m X 1.0m	WHITE
4	SOLID LINE	100mm	WHITE		LANE MARKING SYMBOL	3.0m X 1.35m	WHITE
5	BROKEN LINE	3m–3m–3m, 100mm	WHITE		RESERVED LANE SYMBOL	2.0m X 1.0m	WHITE
6	BROKEN LINE	3m–6m–3m, 100mm	WHITE		SHARROWS	1.0m X 1.0m	WHITE
7	BROKEN LINE	3m–6m–3m, 100mm	YELLOW				

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597), AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL), UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KOEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

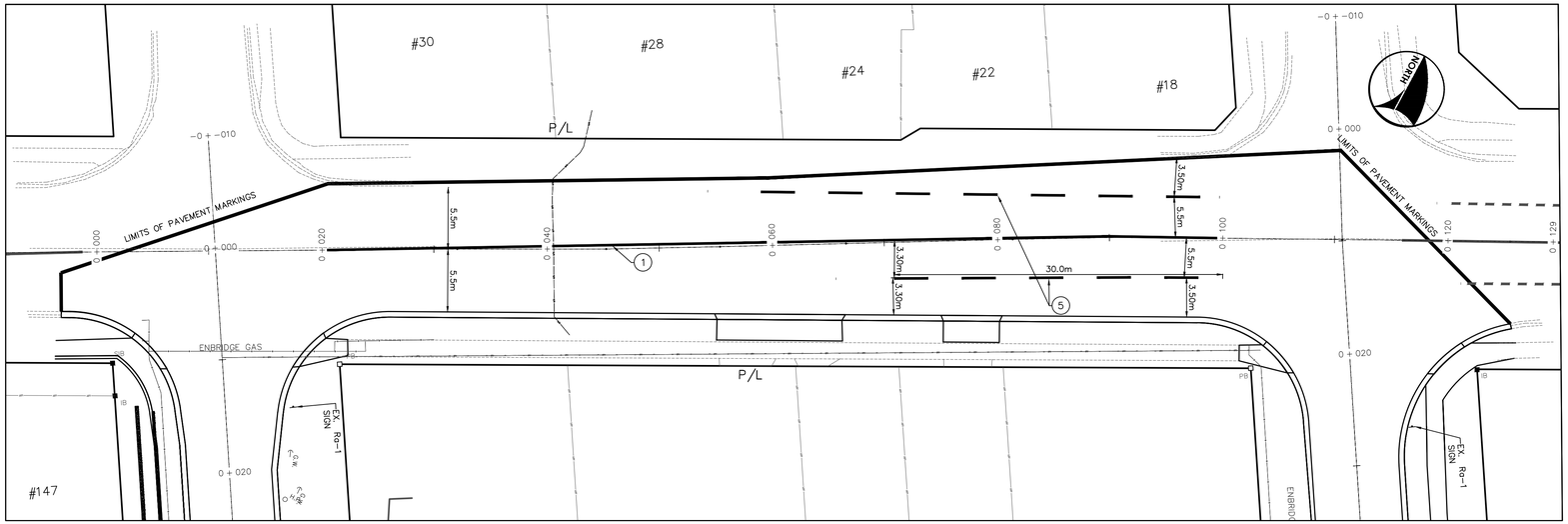
PAVEMENT MARKINGS – MARY STREET
STA. –0+010 TO STA. 0+264

Barrie
INFRASTRUCTURE DEPARTMENT

SCALE HOR. 1:250	VERT.		CONTRACT NO. 2024–108T
DESIGN J.D.H.	DRAWN Z.Z.		SHEET NO. PM–3
REVIEWED J.B.	DATE 2024.05.16		

5/21/2024 11:07 AM JASMINE GROSSE PAVE MARK.DWG

WELLINGTON STREET WEST



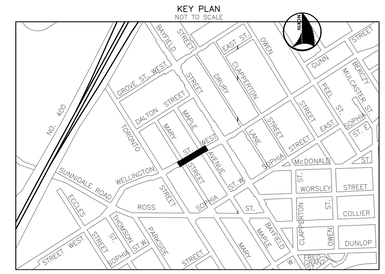
MARY STREET

SEE PM-2

MAPLE AVENUE

SEE PM-3

KEY PLAN
NOT TO SCALE



CONSTRUCTION SIGN INVENTORY

DESCRIPTION	STATION	OFFSET (m)	CONDITION	Replace	Do Not Remove	Remove, Salvage & Install	Install New
SOPHIA STREET WEST							
"STOP HERE ON RED SIGNAL" SIGN	1+036	5.2 L	GOOD			✓	
Ra-1 STOP SIGN	1+076	11.25 L	GOOD			✓	
Ra-1 STOP SIGN	1+087	10.56 R	GOOD			✓	
Ra-1 STOP SIGN	1+176	11.2 L	GOOD			✓	
Ra-1 STOP SIGN	1+177	13.6m R	GOOD			✓	
Ra-1 STOP SIGN	1+187	11.4m L	GOOD			✓	
Ra-1 STOP SIGN	1+188	13.3m R	GOOD			✓	
MAPLE AVENUE							
Ra-1 STOP SIGN	2+037	5.16m L	GOOD			✓	
NO PARKING	2+144	4.8m L	GOOD			✓	
NO PARKING/BUS STOP SIGN	2+210	5.3m L	GOOD			✓	
MARY STREET							
Ra-1 STOP SIGN WITH STREET NAME SIGNS	3+024	6.0m L	GOOD			✓	
NEIGHBORHOOD WATCH COMMUNITY/NO PARKING SIGN	3+045	4.8m R	GOOD			✓	
NO PARKING SIGN	3+161	5.1m R	GOOD			✓	
NO PARKING SIGN	3+214	4.9m R	GOOD			✓	

ALL PAVEMENT MARKINGS TO BE DURABLE

PROPOSED PAVEMENT MARKINGS SHOWN IN BLACK LINETYPE

EXISTING PAVEMENT MARKINGS NOT TO BE PAINTED SHOWN IN GREY LINETYPE

DURABLE PAVEMENT MARKINGS LEGEND

	NAME OF LINE	DIMENSION	COLOUR		NAME OF LINE	DIMENSION	COLOUR
1	SOLID LINE	100mm	YELLOW	8	BICYCLE LANE BROKEN LINE	1m-1m-1m 100mm	WHITE
2	SOLID CROSSWALK LINE	100mm	WHITE	9	CROSSWALKS WITH ZEBRA LINES	SEE DET1	WHITE
3	SOLID STOP BAR	600mm	WHITE		BICYCLE LANE SYMBOL	2.0m X 1.0m	WHITE
4	SOLID LINE	100mm	WHITE		LANE MARKING SYMBOL	3.0m X 1.35m	WHITE
5	BROKEN LINE	3m-3m-3m, 100mm	WHITE		RESERVED LANE SYMBOL	2.0m X 1.0m	WHITE
6	BROKEN LINE	3m-6m-3m, 100mm	WHITE		SHARROWS	1.0m X 1.0m	WHITE
7	BROKEN LINE	3m-6m-3m, 100mm	YELLOW				

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597), AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL), UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161850
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

PAVEMENT MARKINGS – WELLINGTON STREET
STA. 0+000 TO STA. 0+129

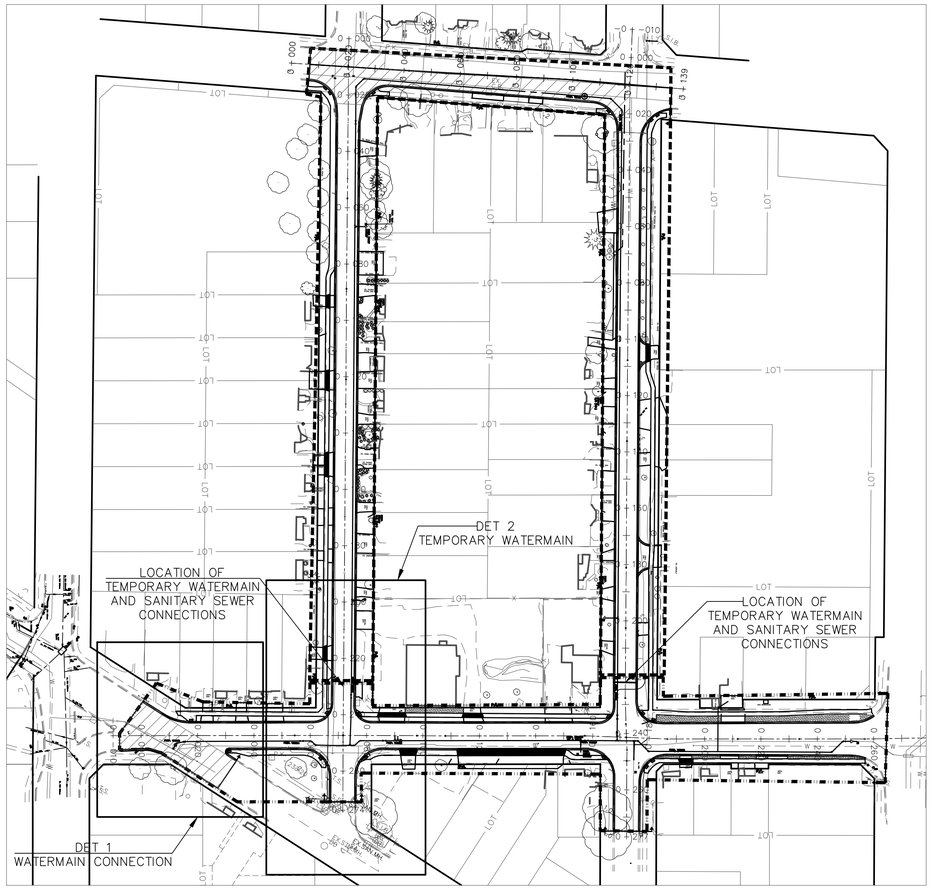
Barrie

INFRASTRUCTURE DEPARTMENT

SCALE HOR. 1:250	VERT.	CONTRACT NO.	2024-108T
DESIGN J.D.H.	DRAWN Z.Z.	SHEET NO.	PM-4
REVIEWED J.B.	DATE 2024.05.16		

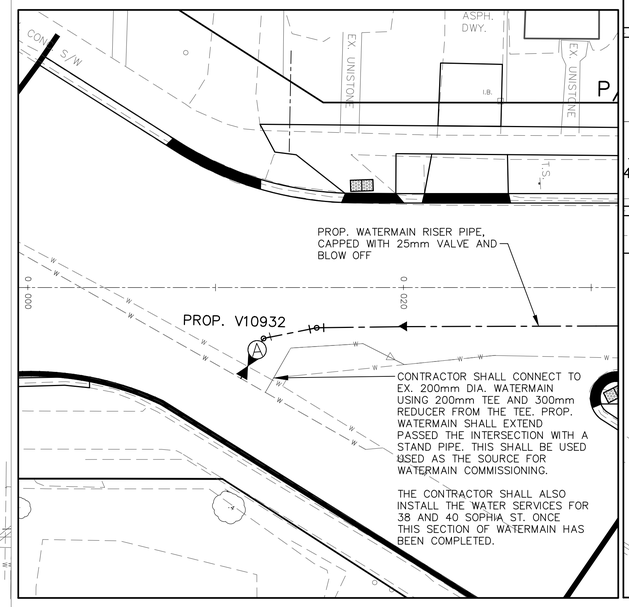
5/21/2024 11:08 AM JASMINE GROSSE PAVE MARK.DWG

PHASING PLAN

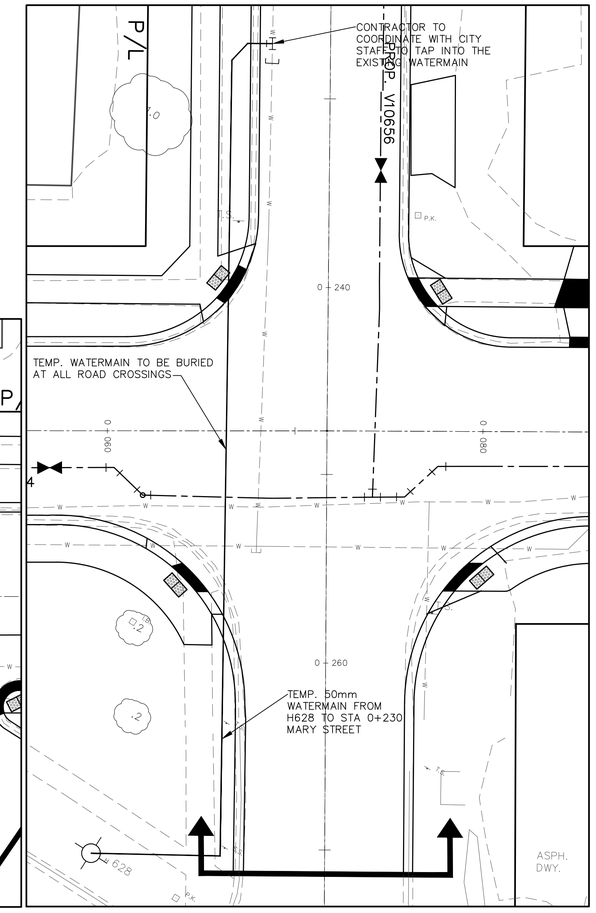


LEGEND

- PHASE 1
- PHASE 2
- TEMP ASPHALT



DET 1
WATERMAIN CONNECTION
SCALE 1:150



DET 2
TEMPORARY WATERMAIN
SCALE 1:150

PHASE 1 – CONSTRUCTION LIMITS: SOPHIA ST. FROM ROSS ST. TO BAYFIELD ST.

SUGGESTED ORDER OF PIPE INSTALLATION:

1. INSTALL 50mm TEMP. WATERMAIN BYPASS AT MARY ST.
2. SANITARY SEWER BETWEEN ROSS ST. AND MARY ST. INCLUDING A TEMPORARY CONNECTION ON MARY ST. SANITARY SEWER
3. WATERMAIN BETWEEN ROSS ST. AND BAYFIELD ST. INCLUDING MAPLE AVE. BRANCH CROSSING BELOW THE PROP. STORM SEWER
4. WATERMAIN COMMISSIONING
5. STORM SEWER INSTALLATION BETWEEN ROSS ST. AND BAYFIELD ST.

PHASE 2 – CONSTRUCTION LIMITS:

MARY ST. FROM SOPHIA ST. TO WELLINGTON ST.
MAPLE AVE. FROM SOPHIA ST. TO WELLINGTON ST.
WELLINGTON ST. FROM MARY ST. TO MAPLE AVE.

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GRID DISTANCES AND CAN BE CONVERTED TO GROUND DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 1.0003.

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 031910009 (N=4914801.348, E=601584.468)AND 010860410 (N=4913103.464, E=606668.620). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) 84 ZONE, 17 AND ARE BASED ON NAD27 (76 ADJUSTMENT).

BENCH MARK V010865470

269.751 – BRASS TABLET SET IN CONCRETE HEADWALL OF UNDERGROUND STORM SEWER ENTRANCE ON WEST SIDE OF FERNDALE DRIVE NORTH, 1.0KM NORTH OF EDGEHILL DRIVE. TABLET IS SET HORIZONTALLY IN EAST FACE OF WESTERLY WALL, 15.0m WEST OF CENTRELINE OF FERNDALE DRIVE NORTH, 44CM SOUTH OF NORTHWEST END AND .37CM BELOW TOP OF CONCRETE WALL.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

PHASING PLAN

Barrie
ENGINEERING DEPARTMENT

SCALE HOR.	1:1000	VERT.	---	CONTRACT NO.	2024–108T
DESIGN	M.C.	DRAWN	M.C.	SHEET NO.	PH1
REVIEWED	J.B.	DATE	2024.05.16		

5/21/2024 12:06 PM JASMINE GROSSE STAGING PLAN.DWG

KEY PLAN – NTS

DRAWING LIST

T1	COVER PAGE
EL1	ELECTRICAL DESIGN – SOPHIA STREET
EL2	ELECTRICAL DESIGN – MARY ST. AND MAPLE AVE.
EL3	ELECTRICAL DETAILS
EL4	LIGHTING DETAILS
L1	EXISTING PHOTOMETRICS – SOPHIA STREET
L2	EXISTING PHOTOMETRICS – MARY ST. AND MAPLE AVE.
L3	PROPOSED PHOTOMETRICS – SOPHIA STREET
L4	PROPOSED PHOTOMETRICS – MARY ST. AND MAPLE AVE.
E1	JOINT USE LAYOUT – SOPHIA STREET (JUA APPROVED, INCLUDED FOR COMPLETENESS)
E2	JOINT USE LAYOUT – MARY ST. AND MAPLE AVE. (JUA APPROVED, INCLUDED FOR COMPLETENESS)
P1	JOINT USE POLE PROFILES – SOPHIA STREET (JUA APPROVED, INCLUDED FOR COMPLETENESS)
P2	JOINT USE POLE PROFILES – MARY ST. AND MAPLE AVE. (JUA APPROVED, INCL. FOR COMPLETENESS)

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING
Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

Client
CITY OF BARRIE
70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD
STREET LIGHTING & JOINT USE

Drawing Title
COVER PAGE

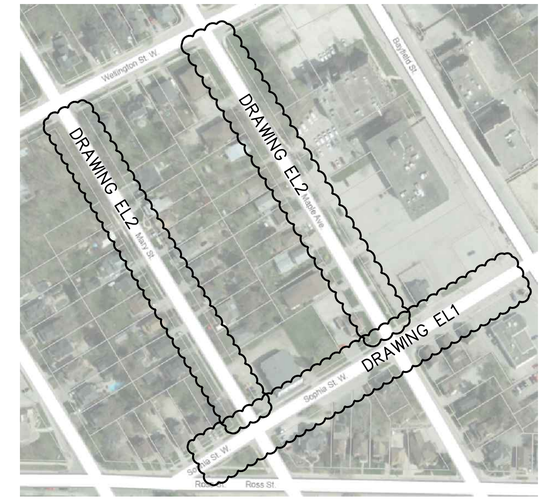
Drawn By	Checked By	Drawing No.
RJW	AD	T1
Scale: AS SHOWN	Project No.: 121268	

ELECTRICAL LEGEND:

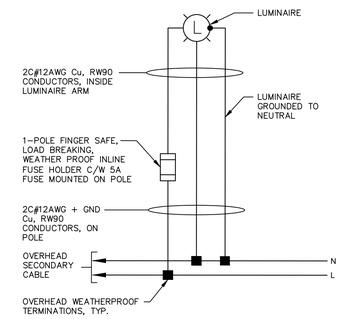
Y—* LX L	PROPOSED MUNICIPAL STREET LIGHT ON DIRECT BURIED POLE. LX = LUMINAIRE SPECIFICATION E.G. L1, L2, L3 L = MOUNTED ON LIGHT POLE Y = POWER PANEL CONNECTION E.G. A, B, C * = CIRCUIT WITHIN POWER PANEL E.G. 1, 2, 3
*** LX H	PROPOSED MUNICIPAL STREET LIGHT ON EXISTING HYDRO POLE. LX = LUMINAIRE SPECIFICATION E.G. L1, L2, L3 H = MOUNTED ON HYDRO POLE *** = MAST ARM DETAIL: EX. = EXISTING, REUSE TR. = TRANSFER EXISTING FROM OLD HYDRO POLE TO NEW NEW = SUPPLY AND INSTALL NEW
	PROPOSED STREET LIGHT POWER PANEL, MOUNTED TO HYDRO POLE.
OH	EXISTING OVERHEAD SECONDARY (ALECTRA OWNED)
SL	NEW STREETLIGHT CABLE IN DUCTBANK
1SL,1XSL	PROPOSED UNDERGROUND ROAD CROSSINGS (RC), DUCT BANK (TYPE DB2) FOR ELECTRICAL CABLES AS FOLLOWS: • 1SL = STREET LIGHT DUCT • 1XSL = SPARE STREET LIGHT DUCT

NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR ALL LOCATES: UNDERGROUND HYDRO, TRAFFIC SIGNAL DUCTS, BELL FIBRE OPTIC CABLES, WATER MAIN, CABLE TV CABLES, ETC.
2. ALL DUCTING TO BE MINIMUM OF 760MM DEPTH
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE SERVICE CONNECTION WITH ALECTRA.
4. ALL HYDRO POLE MOUNTED LUMINAIRES (LXH) ARE NEW, OF THE TYPE INDICATED ON THE LAYOUT DRAWINGS. NEW LUMINAIRES TO BE INSTALLED ON EITHER EXITING (EX.), NEW (NEW) OR EXISTING TRANSFERRED (TR.) MAST ARMS AS INDICATED FOR EACH POLE ON THE LAYOUT DRAWINGS.
5. AT TIME OF TENDERING ALL "NEW" HYDRO POLE HAVE BEEN INSTALLED BY ALECTRA. "OLD" HYDRO POLES WILL REMAIN UNTIL COMMUNICATION AND STREET LIGHTING IS TRANSFERRED TO THE "NEW" POLES. CONTRACTOR TO COORDINATE REMOVAL OF THE "OLD" POLES ONCE ALL JOINT USE ATTACHMENTS ARE TRANSFERRED.

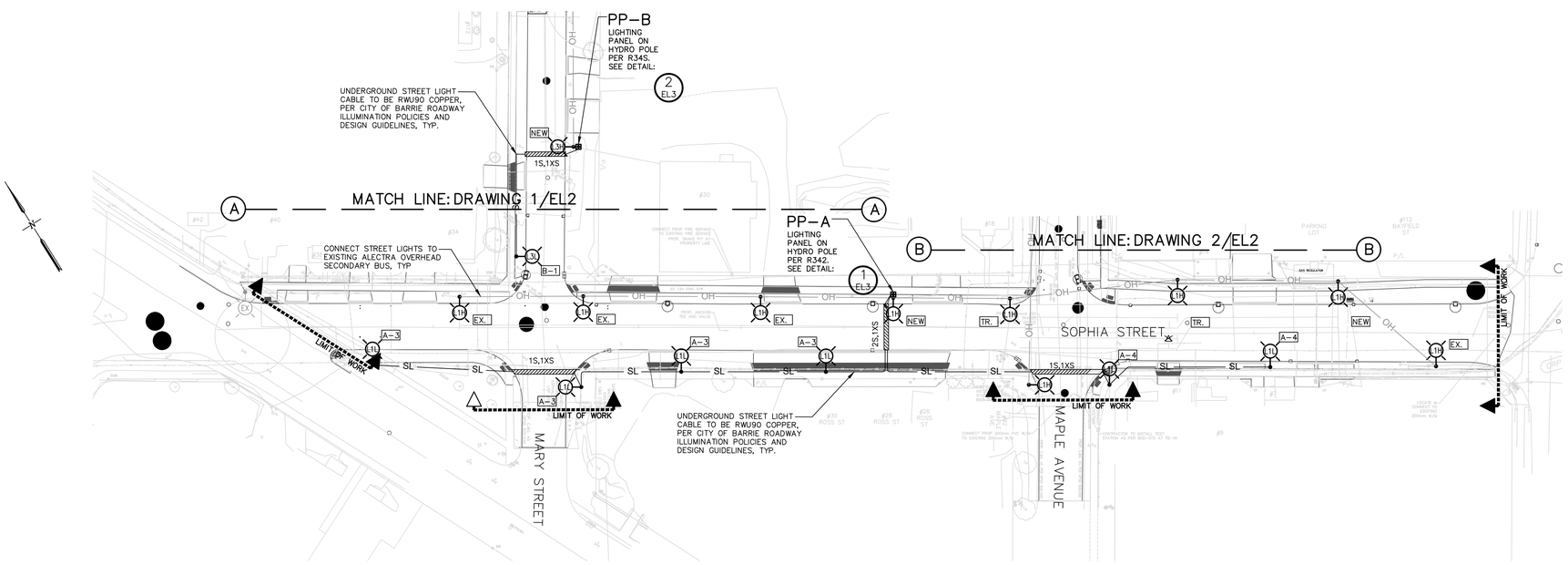


KEY PLAN – NTS



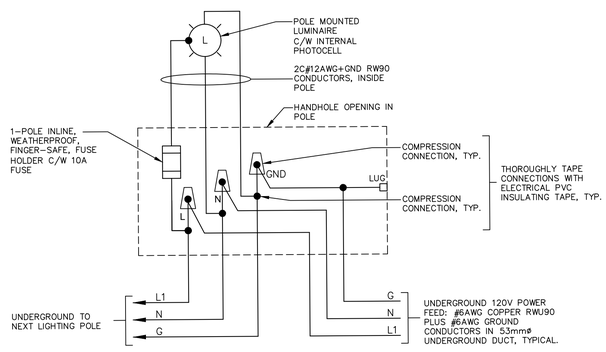
2 EL1 TYPICAL OVERHEAD STREET LIGHT WIRING DIAGRAM

NTS



1 EL1 SOPHIA STREET ELECTRICAL DESIGN

SCALE – 1:500



3 EL1 TYPICAL STREET LIGHT WIRING DIAGRAM

NTS

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444–2565
www.tathameng.com

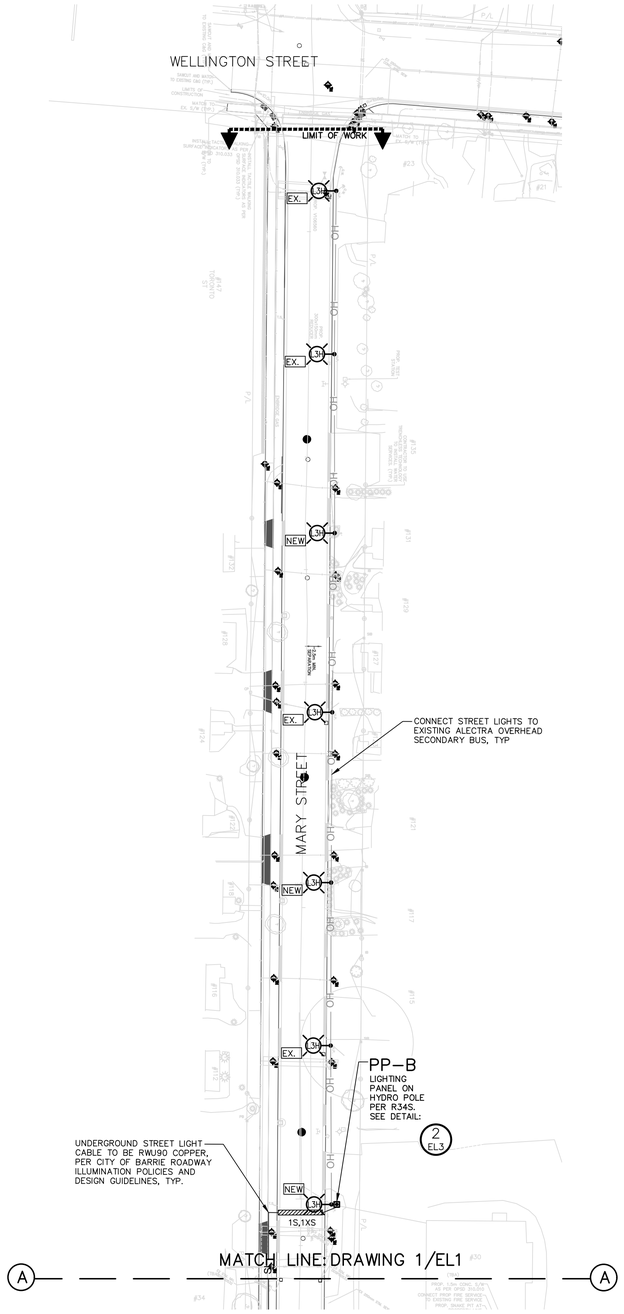
Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

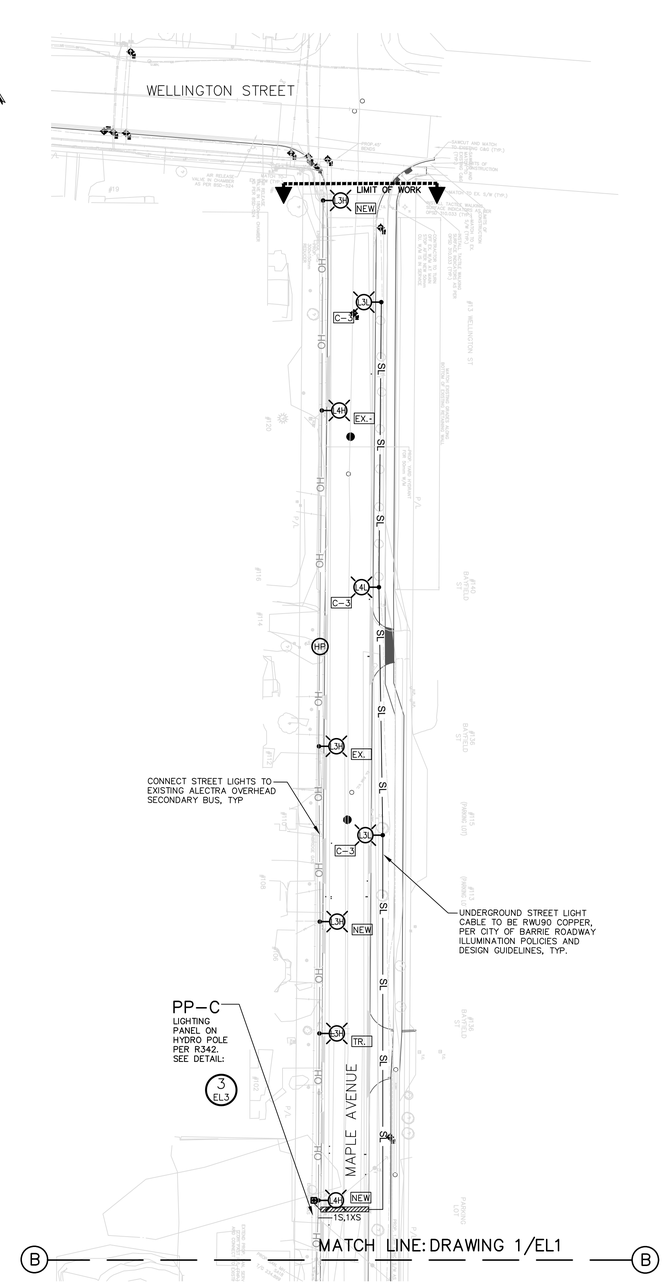
Drawing Title
ELECTRICAL DESIGN – SOPHIA STREET

Drawn By	Checked By	Drawing No.
RJW	AD	EL1
Scale: AS SHOWN	Project No.: 121268	



1 EL2 **MARY STREET ELECTRICAL DESIGN**

SCALE – 1:500



2 EL2 **MAPLE STREET ELECTRICAL DESIGN**

SCALE – 1:500

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

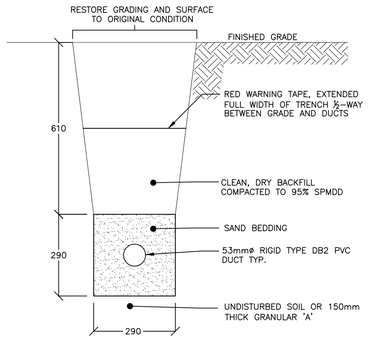
Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

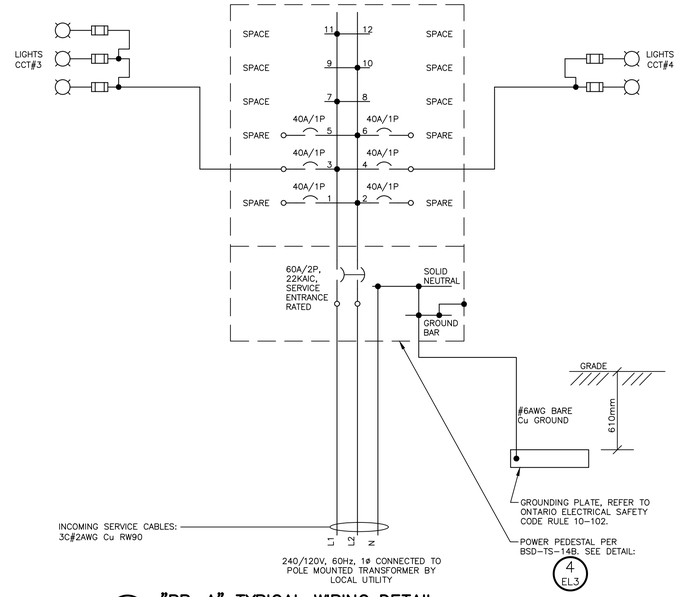
Drawing Title
ELECTRICAL DESIGN – MARY ST. AND MAPLE AVE.

Drawn By	Checked By	Drawing No.
RJW	AD	EL2
Scale	Project No.	
AS SHOWN	121268	



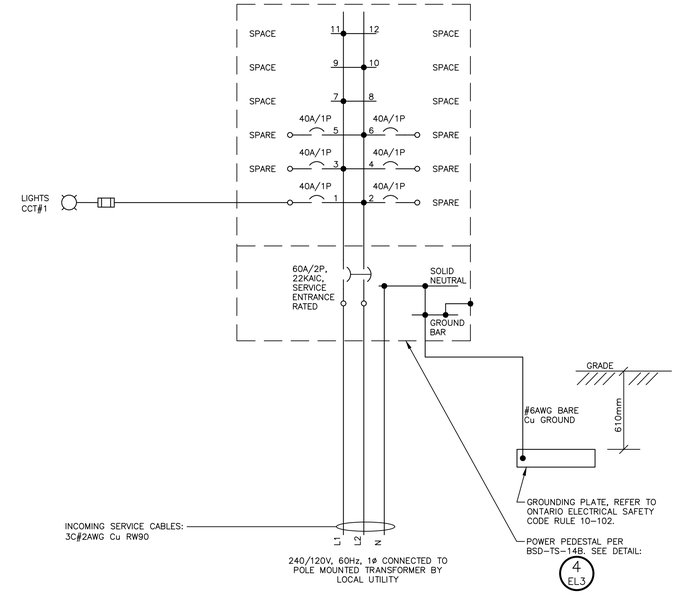
5 EL3 TYPICAL LIGHTING DUCTBANK DETAIL

NTS



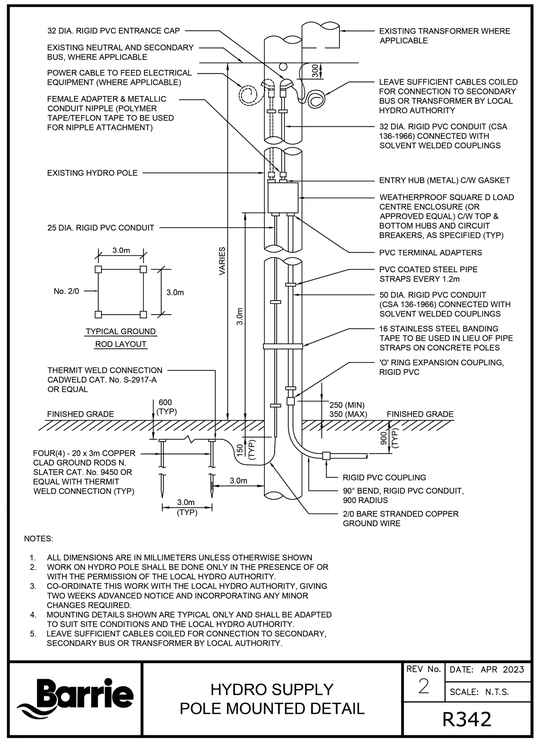
1 EL3 "PP-A" TYPICAL WIRING DETAIL

NTS



2 EL3 "PP-B" TYPICAL WIRING DETAIL

NTS



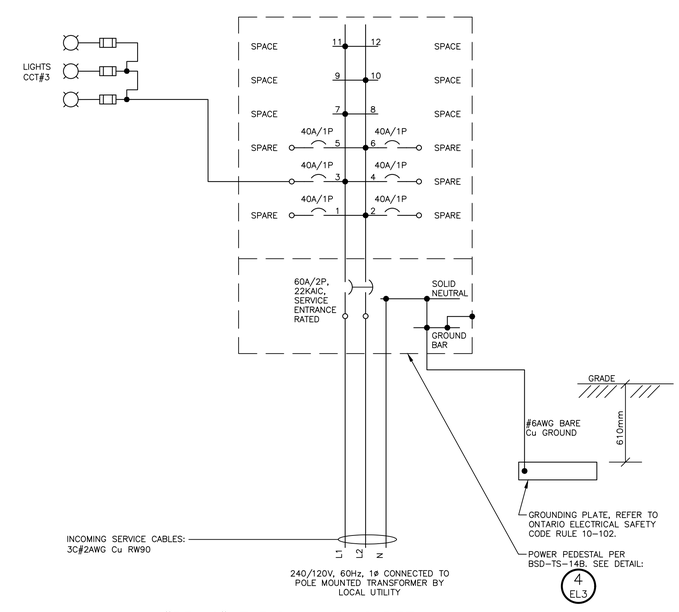
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN
2. WORK ON HYDRO POLE SHALL BE DONE ONLY IN THE PRESENCE OF OR WITH THE PERMISSION OF THE LOCAL HYDRO AUTHORITY.
3. CO-ORDINATE THIS WORK WITH THE LOCAL HYDRO AUTHORITY, GIVING TWO WEEKS ADVANCED NOTICE AND INCORPORATING ANY MINOR CHANGES REQUIRED.
4. MOUNTING DETAILS SHOWN ARE TYPICAL ONLY AND SHALL BE ADAPTED TO SUIT SITE CONDITIONS AND THE LOCAL HYDRO AUTHORITY.
5. LEAVE SUFFICIENT CABLES COILED FOR CONNECTION TO SECONDARY, SECONDARY BUS OR TRANSFORMER BY LOCAL AUTHORITY.

Barrie	HYDRO SUPPLY POLE MOUNTED DETAIL	REV No. 2	DATE: APR 2023
			SCALE: N.T.S.
			R342

4 EL3 R342 BARRIE STANDARD

NTS



3 EL3 "PP-C" TYPICAL WIRING DETAIL

NTS

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

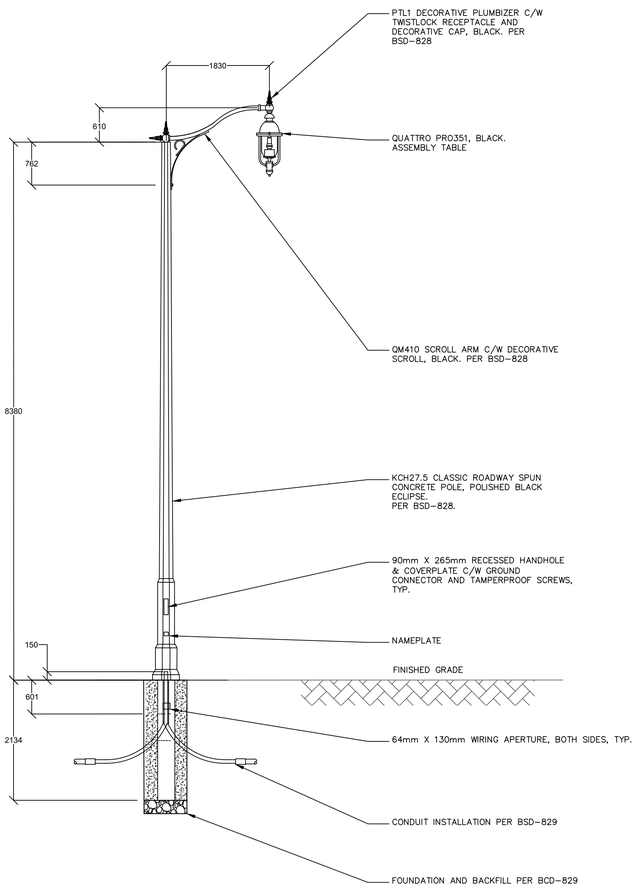
Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

Drawing Title
ELECTRICAL DETAILS

Drawn By	Checked By	Drawing No.
RJW	AD	EL3
Scale	Project No.	
AS SHOWN	121268	



1 EL4 **TYPICAL DECORATIVE POLE AND LUMINAIRE INSTALLATION DETAIL**

NTS

POLE ASSEMBLY DESCRIPTION AND CATALOG NUMBERS
ALL COMPONENTS TO COMPLY WITH CITY OF BARRIE APPROVED COMPONENTS LIST.

TYPE L1L ASSEMBLY

LUMINAIRE: QUATTRO PRO351
- 120VAC
- 109 WATTS
- 14,820 LUMENS
- 4000K CCT
- COLOUR BLACK
- TYPE III

POLE: STRESSCRETE
MODEL KCR27.5-S-11-DB-140 25/30
- DIRECT BURIED CONCRETE POLE
- POLISHED FINISH
- BLACK ECLIPSE
- 9.91m
- HANDHOLE ORIENTATION PER R345

ARM: QM410 SCROLL ARM
- 1830mm X 610mm
- BLACK

PLUMBIZER: PTL1 DECORATIVE PLUBMIZER
- TWISTLOCK RECEPTACLE
- DECORATIVE CAP
- BLACK

PHOTOCELL: FISHER PIERCE FP-7700 SERIES
- TURN ON: 1.0 fc – NORMAL, FACTORY SE
- TURN OFF: 3.0 fc – AVERAGE
- LIGHTING ARRESTER: OPEN TYPE – 2.5kV SPARK OVER MIN 5000A FOLLOW THROUGH
- RATED LIFE: 13yr DESIGN MIN RATED LOAD

POLE ASSEMBLY DESCRIPTION AND CATALOG NUMBERS
ALL COMPONENTS TO COMPLY WITH CITY OF BARRIE APPROVED COMPONENTS LIST.

TYPE L1H ASSEMBLY

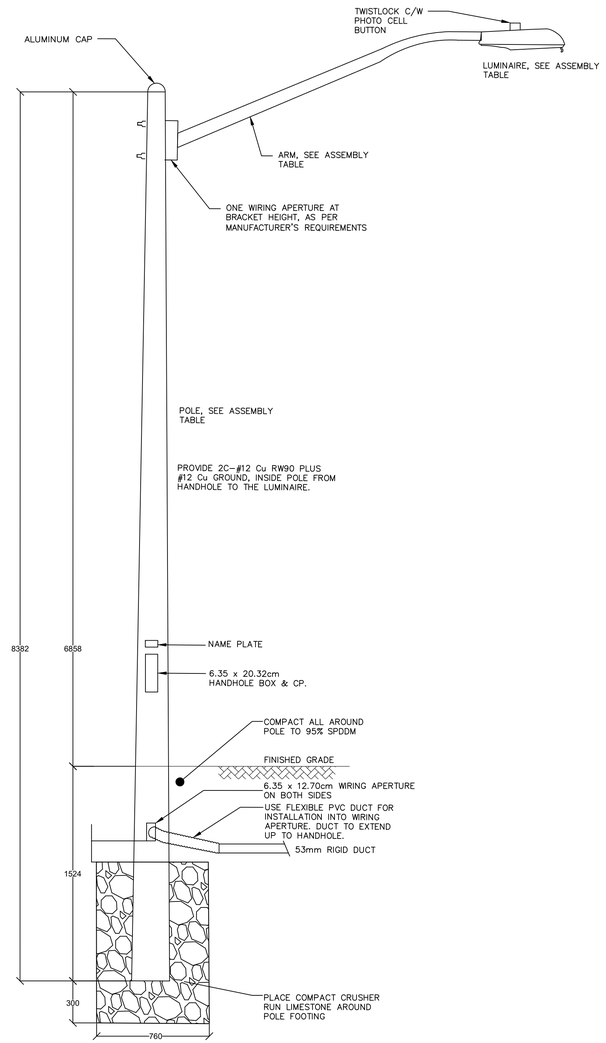
LUMINAIRE: QUATTRO PRO351
- 120VAC
- 109 WATTS
- 14,820 LUMENS
- 4000K CCT
- COLOUR BLACK
- TYPE III

POLE: ATTACHED TO HYDRO POLE

ARM: ***CONFIRM***QM410 SCROLL ARM
- 1830mm X 610mm
- BLACK

PLUMBIZER: PTL1 DECORATIVE PLUBMIZER
- TWISTLOCK RECEPTACLE
- DECORATIVE CAP
- BLACK

PHOTOCELL: FISHER PIERCE FP-7700 SERIES
- TURN ON: 1.0 fc – NORMAL, FACTORY SE
- TURN OFF: 3.0 fc – AVERAGE
- LIGHTING ARRESTER: OPEN TYPE – 2.5kV SPARK OVER MIN 5000A FOLLOW THROUGH
- RATED LIFE: 13yr DESIGN MIN RATED LOAD



2 EL4 **TYPICAL STANDARD POLE AND LUMINAIRE INSTALLATION DETAIL**

NTS

POLE ASSEMBLY DESCRIPTION AND CATALOG NUMBERS
ALL COMPONENTS TO COMPLY WITH CITY OF BARRIE APPROVED COMPONENTS LIST.

TYPE L3L ASSEMBLY

LUMINAIRE: CREE XSPSM-D-HT-3ME-40K7-UL-SV-N
- 120VAC
- 47 WATTS
- 3,690 LUMENS
- 4000K CCT
- COLOUR BLACK
- TYPE III

POLE: UTILITY STRUCTURES INC.
MODEL HA-275-B-1-PG-10
- DIRECT BURIED CONCRETE POLE
- 8.4m (8382mm)
- HANDHOLE ORIENTATION PER R345

ARM: TAPERED ELLIPTICAL MAST ARM
- 8.0' (2400mm)
- GREY

PHOTOCELL FISHER PIERCE FP-7700 SERIES
- 120VAC (105-130VAC RANGE)
- CONTACTS: SPST N.C.
- SUITABLE FOR LED DRIVER LOAD
- TURN ON LEVEL 1.0 FC
- TURN OFF LEVEL 3.0 FC
- LIGHTING ARRESTOR-2.5 kV SPARK OVER MINIMUM 5000 AMP FOLLOW THROUGH

RATED LIFE 13-YEAR DESIGN MINIMUM AT RATED LOAD

POLE ASSEMBLY DESCRIPTION AND CATALOG NUMBERS
ALL COMPONENTS TO COMPLY WITH CITY OF BARRIE APPROVED COMPONENTS LIST.

TYPE L4L ASSEMBLY

LUMINAIRE: CREE XSPSM-D-HT-3ME-40K7-UL-SV-N
- 120VAC
- 46 WATTS
- 5,145 LUMENS
- 4000K CCT
- COLOUR BLACK
- TYPE III

POLE: UTILITY STRUCTURES INC.
MODEL HA-275-B-1-PG-10
- DIRECT BURIED CONCRETE POLE
- 8.4m (8382mm)
- HANDHOLE ORIENTATION PER R345

ARM: TAPERED ELLIPTICAL MAST ARM
- 8.0' (2400mm)
- GREY

PHOTOCELL FISHER PIERCE FP-7700 SERIES
- 120VAC (105-130VAC RANGE)
- CONTACTS: SPST N.C.
- SUITABLE FOR LED DRIVER LOAD
- TURN ON LEVEL 1.0 FC
- TURN OFF LEVEL 3.0 FC
- LIGHTING ARRESTOR-2.5 kV SPARK OVER MINIMUM 5000 AMP FOLLOW THROUGH

RATED LIFE 13-YEAR DESIGN MINIMUM AT RATED LOAD

POLE ASSEMBLY DESCRIPTION AND CATALOG NUMBERS
ALL COMPONENTS TO COMPLY WITH CITY OF BARRIE APPROVED COMPONENTS LIST.

TYPE L3H ASSEMBLY

LUMINAIRE: CREE XSPSM-D-HT-3ME-40K7-UL-SV-N
- 120VAC
- 47 WATTS
- 3,690 LUMENS
- 4000K CCT
- COLOUR BLACK
- TYPE III

POLE: ATTACHED TO HYDRO POLE

ARM: TAPERED ELLIPTICAL MAST ARM
- 8.0' (2400mm)
- GREY

PHOTOCELL FISHER PIERCE FP-7700 SERIES
- 120VAC (105-130VAC RANGE)
- CONTACTS: SPST N.C.
- SUITABLE FOR LED DRIVER LOAD
- TURN ON LEVEL 1.0 FC
- TURN OFF LEVEL 3.0 FC
- LIGHTING ARRESTOR-2.5 kV SPARK OVER MINIMUM 5000 AMP FOLLOW THROUGH

RATED LIFE 13-YEAR DESIGN MINIMUM AT RATED LOAD

POLE ASSEMBLY DESCRIPTION AND CATALOG NUMBERS
ALL COMPONENTS TO COMPLY WITH CITY OF BARRIE APPROVED COMPONENTS LIST.

TYPE L4H ASSEMBLY

LUMINAIRE: CREE XSPSM-D-HT-3ME-40K7-UL-SV-N
- 120VAC
- 46 WATTS
- 5,145 LUMENS
- 4000K CCT
- COLOUR BLACK
- TYPE III

POLE: ATTACHED TO HYDRO POLE

ARM: TAPERED ELLIPTICAL MAST ARM
- 8.0' (2400mm)
- GREY

PHOTOCELL FISHER PIERCE FP-7700 SERIES
- 120VAC (105-130VAC RANGE)
- CONTACTS: SPST N.C.
- SUITABLE FOR LED DRIVER LOAD
- TURN ON LEVEL 1.0 FC
- TURN OFF LEVEL 3.0 FC
- LIGHTING ARRESTOR-2.5 kV SPARK OVER MINIMUM 5000 AMP FOLLOW THROUGH

RATED LIFE 13-YEAR DESIGN MINIMUM AT RATED LOAD

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval
The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING
Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

Client
CITY OF BARRIE
70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

Drawing Title
LIGHTING DETAILS

Drawn By	Checked By	Drawing No.
RJW	AD	EL4
Scale	Project No.	
AS SHOWN	121268	

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
01 RW Maple NB Luminance	Luminance	Cd/Sq.m	0.1	1	0	N.A.	N.A.
01 RW Maple SB Luminance	Luminance	Cd/Sq.m	0.3	1	0	N.A.	N.A.
01 RW Mary NB Luminance	Luminance	Cd/Sq.m	0.5	2	0	N.A.	N.A.
01 RW Mary SB Luminance	Luminance	Cd/Sq.m	0.2	1	0	N.A.	N.A.
01 RW Sophia EB Luminance	Luminance	Cd/Sq.m	0.4	0.8	0.1	3.9	8.0
01 RW Sophia WB Luminance	Luminance	Cd/Sq.m	0.5	1.4	0.2	2.7	7.0
02 INT Sophia & Maple	Illuminance	Lux	7.7	17	1	7.7	N.A.
02 INT Sophia & Mary	Illuminance	Lux	9.8	19	1	9.8	N.A.
03 SW Maple	Illuminance	Lux	0.2	1	0	N.A.	N.A.
03 SW Maple Vert	Illuminance	Lux	0.0	0	0	N.A.	N.A.
03 SW Mary	Illuminance	Lux	0.6	2	0	N.A.	N.A.
03 SW Mary Vert	Illuminance	Lux	0.3	1	0	N.A.	N.A.
03 SW Sophia N	Illuminance	Lux	2.5	8	0	N.A.	N.A.
03 SW Sophia S	Illuminance	Lux	3.9	10	1	3.9	N.A.
03 SW Sophia Vert	Illuminance	Lux	1.5	3	0	N.A.	N.A.
09 TR Maple E	Illuminance	Lux	0.0	0	0	N.A.	N.A.
09 TR Maple W	Illuminance	Lux	0.6	3	0	N.A.	N.A.
09 TR Mary E	Illuminance	Lux	0.5	2	0	N.A.	N.A.
09 TR Mary W	Illuminance	Lux	0.1	1	0	N.A.	N.A.
09 TR Sophia N	Illuminance	Lux	0.7	4	0	N.A.	N.A.
09 TR Sophia S	Illuminance	Lux	1.4	5	0	N.A.	N.A.

Luminaire Schedule					
Symbol	Qty	Label	Tag	LLF	Total Watts
	1	XSPA_2HC-UQ - Input C - 83W -	Ex2	0.830	83
	7	XSPA_1GC-UQ - Input C - 43W -	Ex3	0.830	301
	6	XSPA_2HF-UQ - Input F - 56W -	Ex4	0.830	336

ANSI / IES RP-8-18

Table 11-1: Lighting Design Criteria for Streets

Road:	Sophia Street = Collector
Pedestrian Conflict Area:	Medium
Pavement Classification:	R3
Average Luminance Values:	0.6 cd/sq. m
Uniformity Ratio Max (Avg/Min):	3.5

Table 11-1: Lighting Design Criteria for Streets

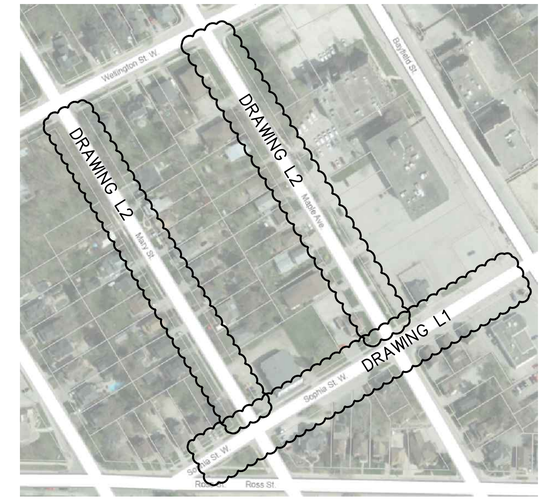
Road:	Mary Street = Local Maple Street = Local
Pedestrian Conflict Area:	Medium
Pavement Classification:	R3
Average Luminance Values:	0.5 cd/sq. m
Uniformity Ratio Max (Avg/Min):	6.0

Table 12-1: Pavement Illuminance Criteria for Full Intersection Lighting

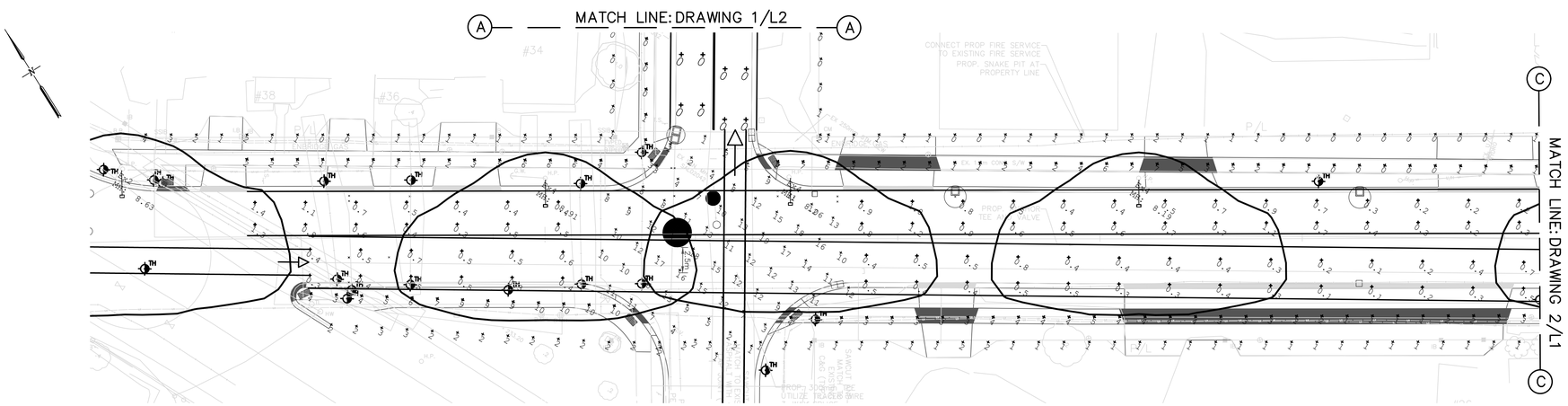
Functional Classification:	Collector / Local / Medium
Average Maintained Illuminance:	16.0 Lux
Uniformity Ratio Max. (Avg / Min):	4.0

Table 16-2: Illuminance Criteria for Walkways

Average Horizontal:	5 Lux
Minimum Vertical:	2 Lux
Uniformity Ratio Max. (Avg / Min):	4.0

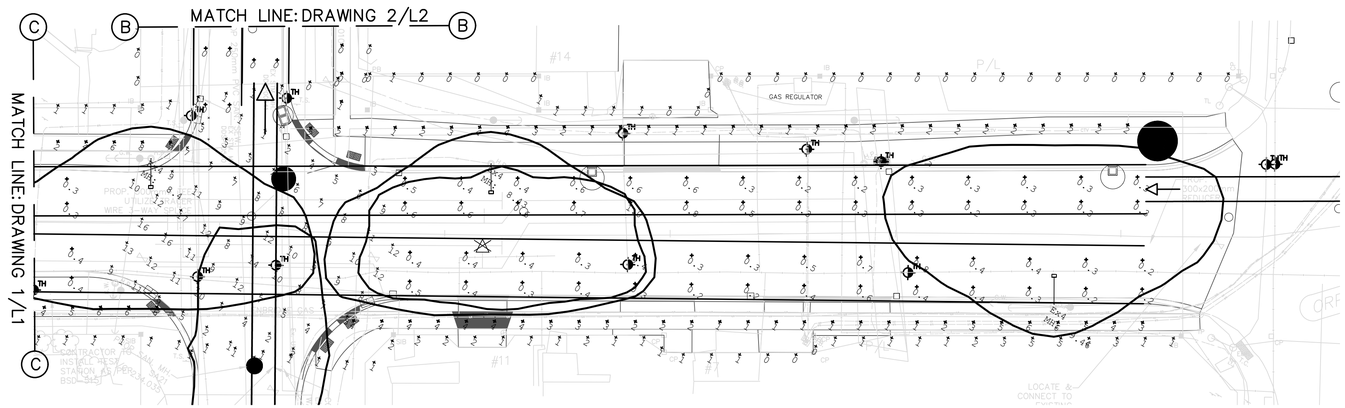


KEY PLAN – NTS



1 L1 SOPHIA STREET EXISTING PHOTOMETRICS

SCALE – 1:250



2 L1 SOPHIA STREET EXISTING PHOTOMETRICS

SCALE – 1:250

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

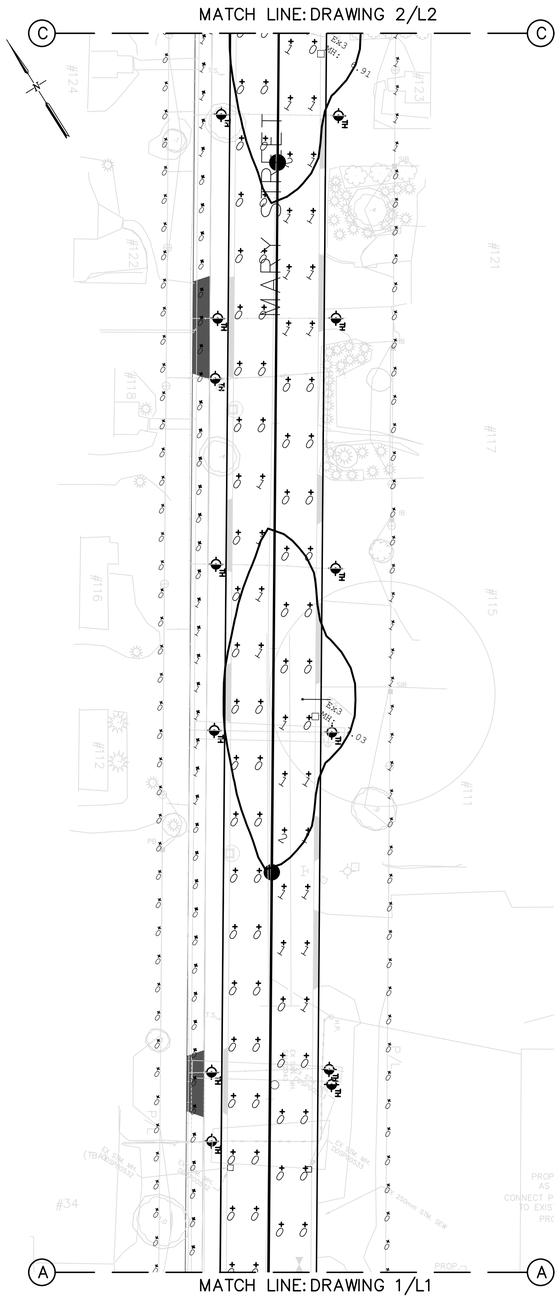
Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD
STREET LIGHTING & JOINT USE

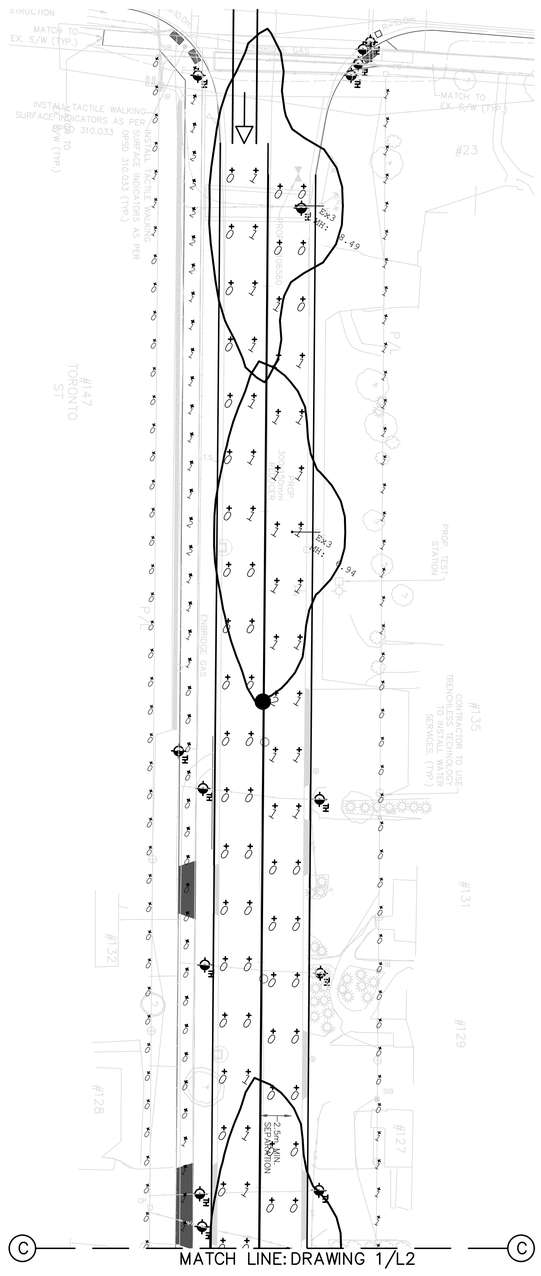
Drawing Title
EXISTING PHOTOMETRICS –
SOPHIA STREET

Drawn By	Checked By	Drawing No.
RJW	AD	L1
Scale	Project No.	
AS SHOWN	121268	



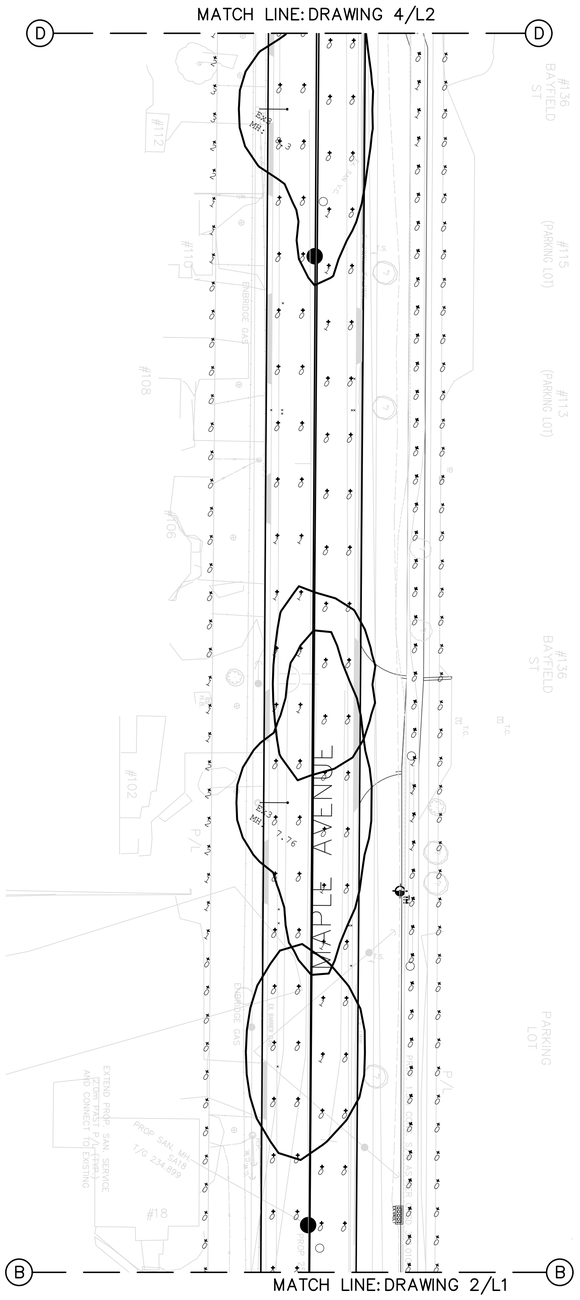
1 L2 MARY STREET EXISTING PHOTOMETRICS

SCALE – 1:250



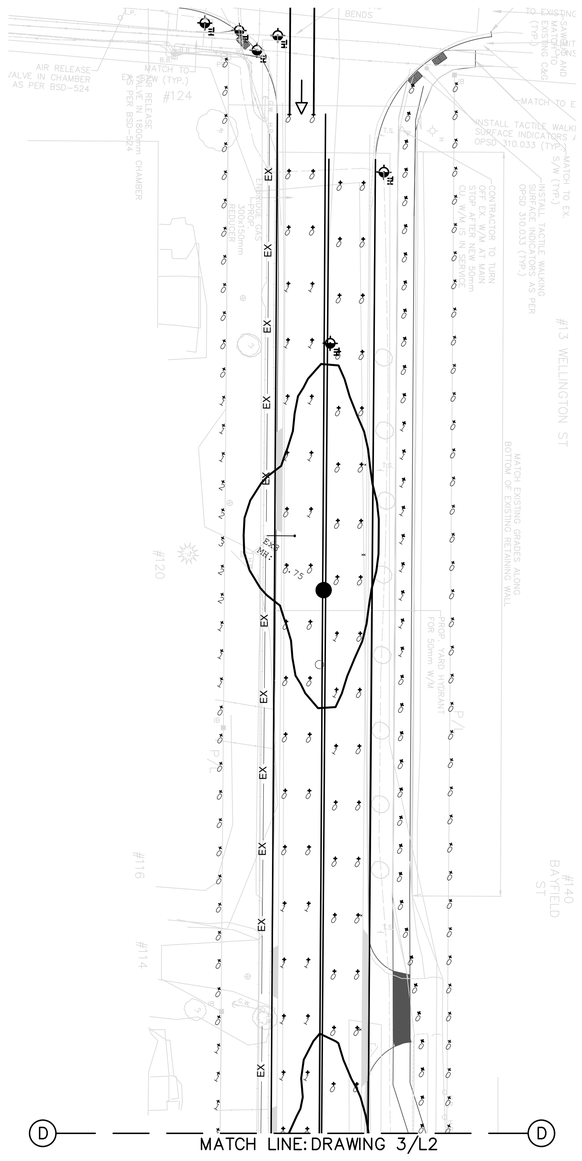
2 L2 MARY STREET EXISTING PHOTOMETRICS

SCALE – 1:250



3 L2 MAPLE STREET EXISTING PHOTOMETRICS

SCALE – 1:250



4 L2 MAPLE STREET EXISTING PHOTOMETRICS

SCALE – 1:250

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD
STREET LIGHTING & JOINT USE

Drawing Title
EXISTING PHOTOMETRICS –
MARY ST. AND MAPLE AVE.

Drawn By	Checked By	Drawing No.
RJW	AD	L2
Scale	Project No.	
AS SHOWN	121268	

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
01 RW Maple NB Luminance	Luminance	Cd/Sq.m	0.7	1.2	0.3	2.4	4.0
01 RW Maple SB Luminance	Luminance	Cd/Sq.m	0.7	1.4	0.2	3.6	7.0
01 RW Mary NB Luminance	Luminance	Cd/Sq.m	0.7	1.2	0.2	3.4	6.0
01 RW Mary SB Luminance	Luminance	Cd/Sq.m	0.5	0.9	0.3	1.7	3.0
01 RW Sophia EB Luminance	Luminance	Cd/Sq.m	0.9	1.3	0.3	3.1	4.3
01 RW Sophia WB Luminance	Luminance	Cd/Sq.m	1.0	1.5	0.3	3.2	5.0
02 INT Sophia & Maple	Illuminance	Lux	15.6	27	4	3.9	N.A.
02 INT Sophia & Mary	Illuminance	Lux	16.0	26	6	2.7	N.A.
03 SW Maple	Illuminance	Lux	4.6	7	3	1.5	N.A.
03 SW Maple Vert	Illuminance	Lux	4.6	6	3	1.5	N.A.
03 SW Mary	Illuminance	Lux	5.3	7	3	1.8	N.A.
03 SW Mary Vert	Illuminance	Lux	5.5	8	2	2.8	N.A.
03 SW Sophia N	Illuminance	Lux	4.3	8	2	2.2	N.A.
03 SW Sophia S	Illuminance	Lux	7.9	17	3	2.6	N.A.
03 SW Sophia Vert	Illuminance	Lux	3.2	4	2	1.6	N.A.
09 TR Maple E	Illuminance	Lux	2.9	5	1	2.9	N.A.
09 TR Maple W	Illuminance	Lux	2.2	4	0	N.A.	N.A.
09 TR Mary E	Illuminance	Lux	0.4	5	0	N.A.	N.A.
09 TR Mary W	Illuminance	Lux	3.6	5	2	1.8	N.A.
09 TR Sophia N	Illuminance	Lux	2.0	5	0	N.A.	N.A.
09 TR Sophia S	Illuminance	Lux	4.1	8	1	4.1	N.A.

Luminaire Schedule						
Symbol	Qty	Description	Tag	LLF	Total Watts	Label
	6	L1 Luminaire on Light Pole	L1L	0.900	763	PRO351-L3HS-GPC-109LEDV4 0 1
	10	L1 Luminaire on Hydro Pole	L1H	0.900	981	PRO351-L3HS-GPC-109LEDV4 0
	1	L3 luminaire on Light Pole	L3L	0.900	47	XSPSM-D-HT-3ME-5L-40K7-(3690L)
	13	L3 luminaire on Hydro Pole	L3H	0.900	611	XSPSM-D-HT-3ME-5L-40K7-(3690L_)
	1	L4 luminaire on Light Pole	L4L	0.900	45.86	XSPSM-D-HT-3ME-5L-40K7-(5145L)
	2	L4 luminaire on Hydro Pole	L4H	0.900	91.72	XSPSM-D-HT-3ME-5L-40K7-(5145L_)

ANSI / IES RP-8-18

Table 11-1: Lighting Design Criteria for Streets

Road:	Sophia Street = Collector
Pedestrian Conflict Area:	Medium
Pavement Classification:	R3
Average Luminance Values:	0.6 cd/sq. m
Uniformity Ratio Max (Avg/Min):	3.5

Table 11-1: Lighting Design Criteria for Streets

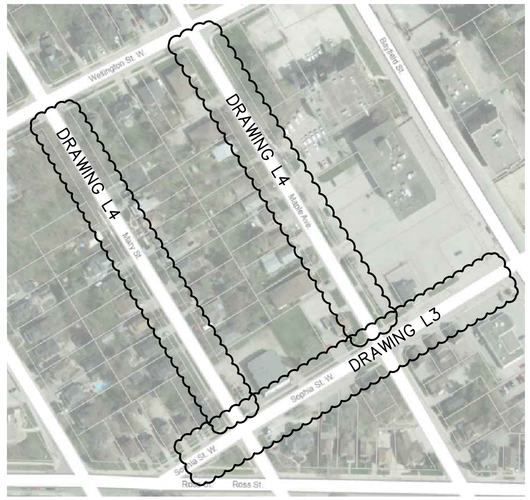
Road:	Mary Street = Local Maple Street = Local
Pedestrian Conflict Area:	Medium
Pavement Classification:	R3
Average Luminance Values:	0.5 cd/sq. m
Uniformity Ratio Max (Avg/Min):	6.0

Table 12-1: Pavement Illuminance Criteria for Full Intersection Lighting

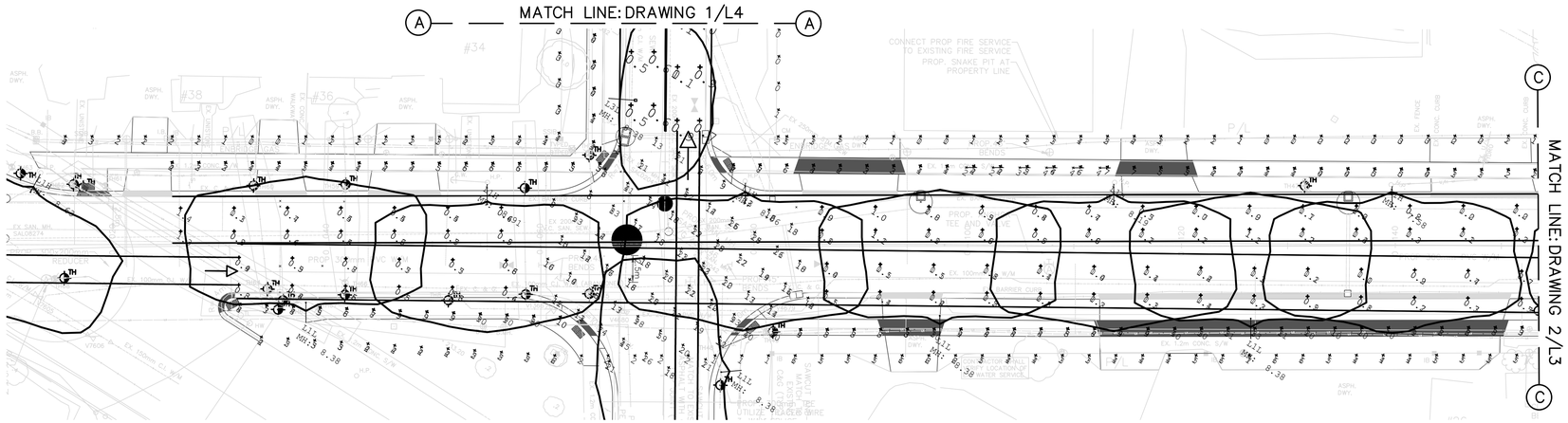
Functional Classification:	Collector / Local / Medium
Average Maintained Illuminance:	16.0 Lux
Uniformity Ratio Max. (Avg / Min):	4.0

Table 16-2: Illuminance Criteria for Walkways

Average Horizontal:	5 Lux
Minimum Vertical:	2 Lux
Uniformity Ratio Max. (Avg / Min):	4.0

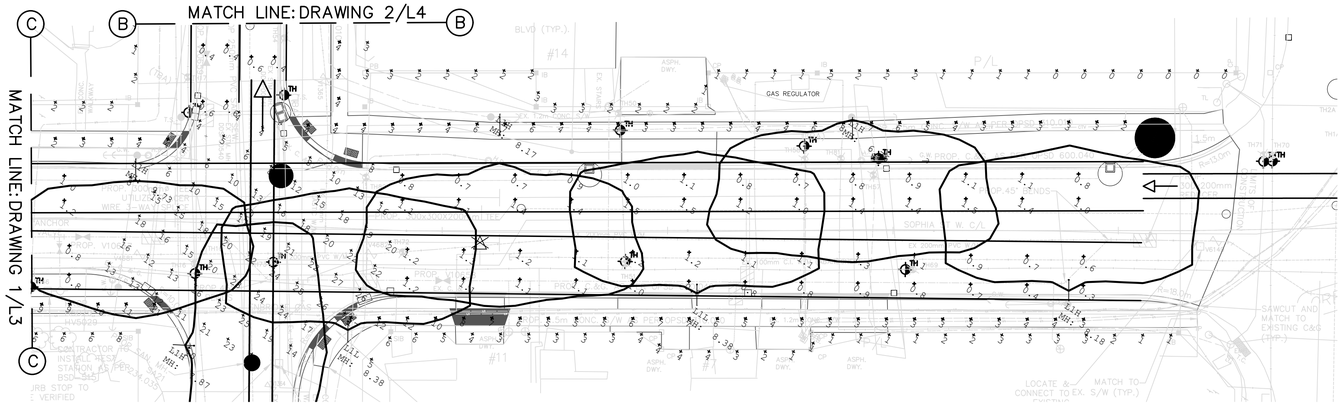


KEY PLAN – NTS



1 L3 SOPHIA STREET PROPOSED PHOTOMETRICS

SCALE – 1:250



2 L3 SOPHIA STREET PROPOSED PHOTOMETRICS

SCALE – 1:250

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

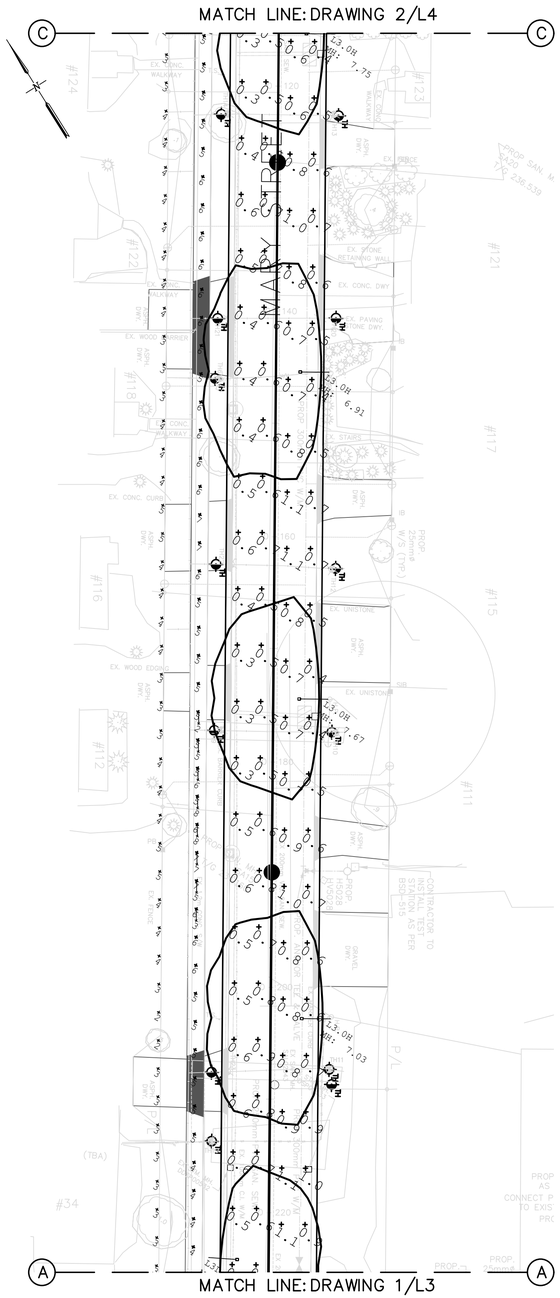
Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

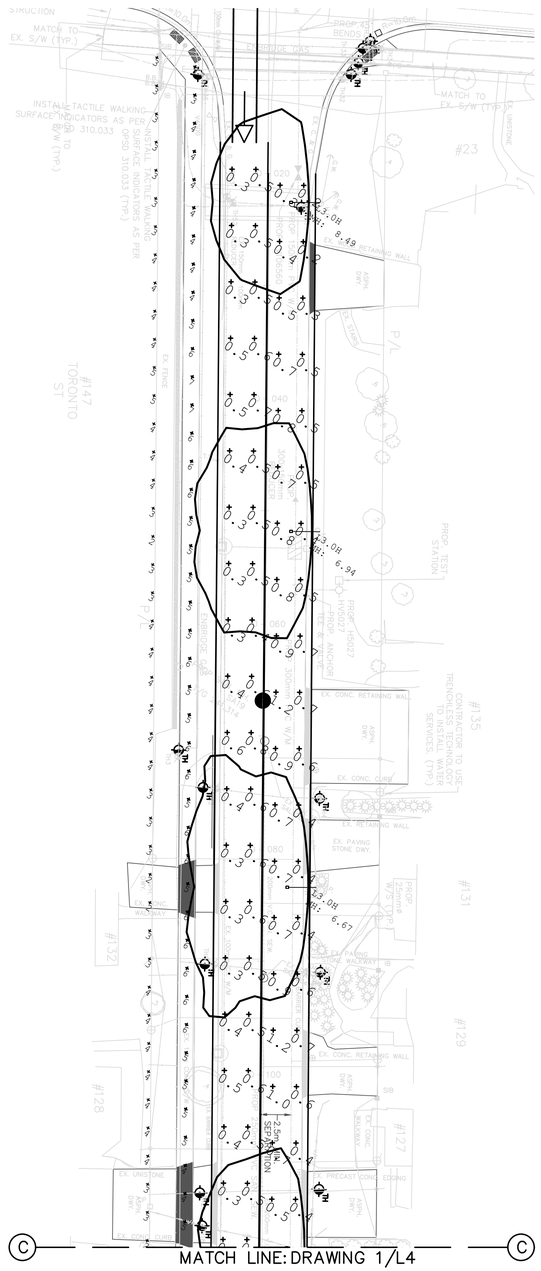
Drawing Title
PROPOSED PHOTOMETRICS – SOPHIA STREET

Drawn By	Checked By	Drawing No.
RJW	AD	L3
Scale	Project No.	
AS SHOWN	121268	



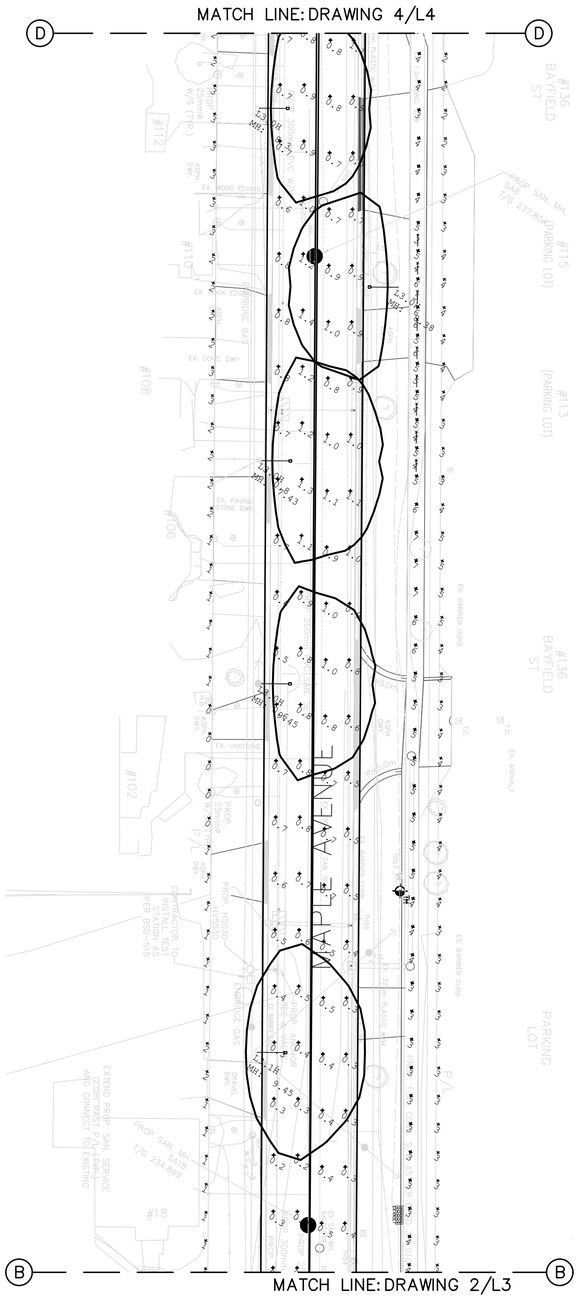
1 L4 **MARY STREET PROPOSED PHOTOMETRICS**

SCALE – 1:250



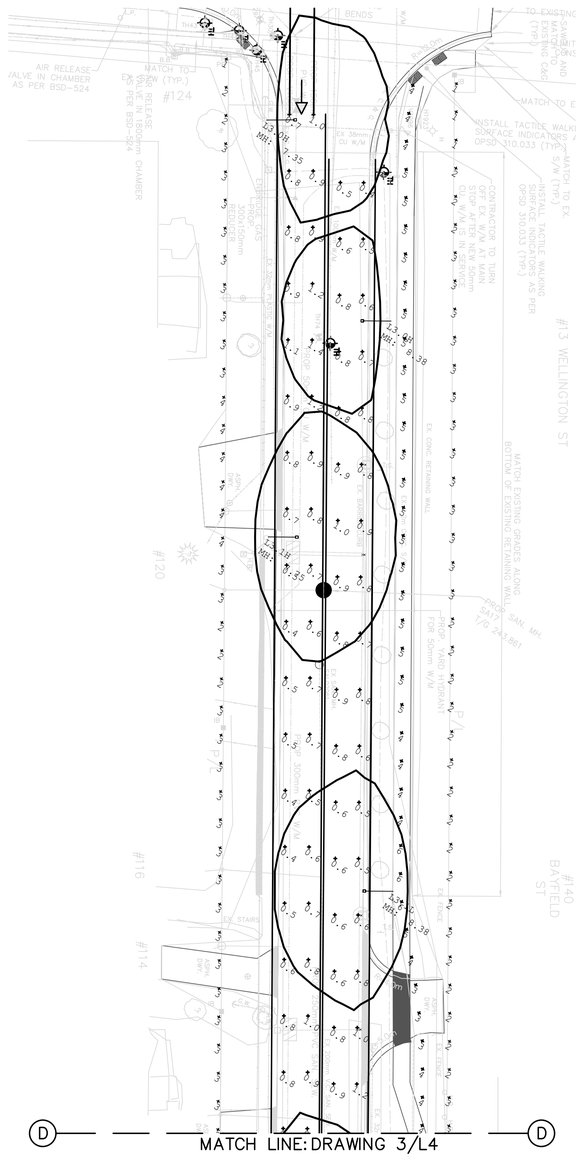
2 L4 **MARY STREET PROPOSED PHOTOMETRICS**

SCALE – 1:250



3 L4 **MAPLE STREET PROPOSED PHOTOMETRICS**

SCALE – 1:250



4 L4 **MAPLE STREET PROPOSED PHOTOMETRICS**

SCALE – 1:250

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

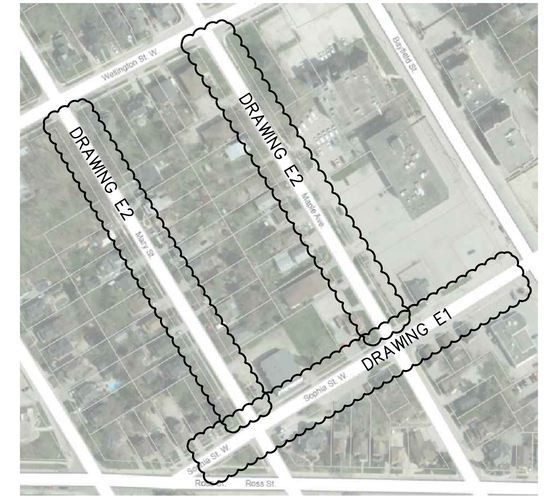
Project Name
QUEEN'S PARK NEIGHBORHOOD
STREET LIGHTING & JOINT USE

Drawing Title
PROPOSED PHOTOMETRICS –
MARY ST. AND MAPLE AVE.

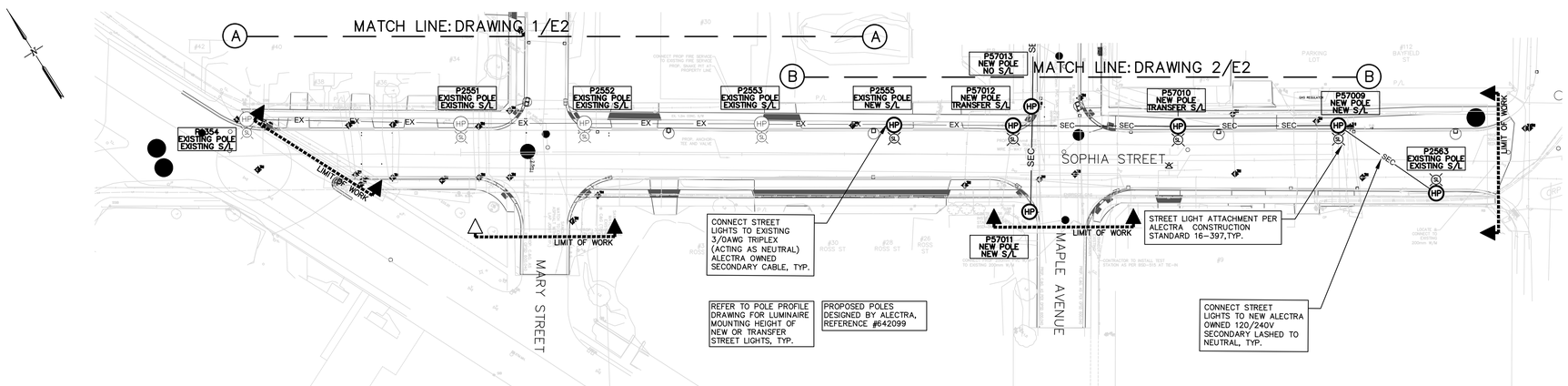
Drawn By	Checked By	Drawing No.
RJW	AD	L4
Scale	Project No.	
AS SHOWN	121268	

STANDARD ELECTRICAL LEGEND

SL	TRANSFER EXISTING STREET LIGHT TO NEW POLE
SEC SEC	EXISTING ALECTRA OWNED OVERHEAD SECONDARY
TYP.	TYPICAL
PXX HP	EXISTING POWER POLE WITH TAG NUMBER
SL HP	EXISTING POWER POLE AND STREETLIGHT

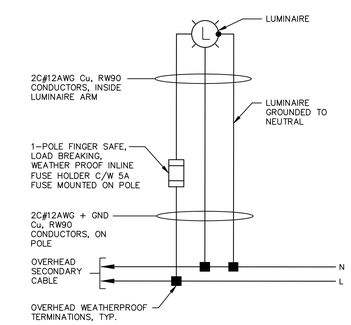


KEY PLAN – NTS



1 E1 SOPHIA STREET

SCALE – 1:500



2 E1 TYPICAL STREET LIGHT WIRING DIAGRAM

NTS

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

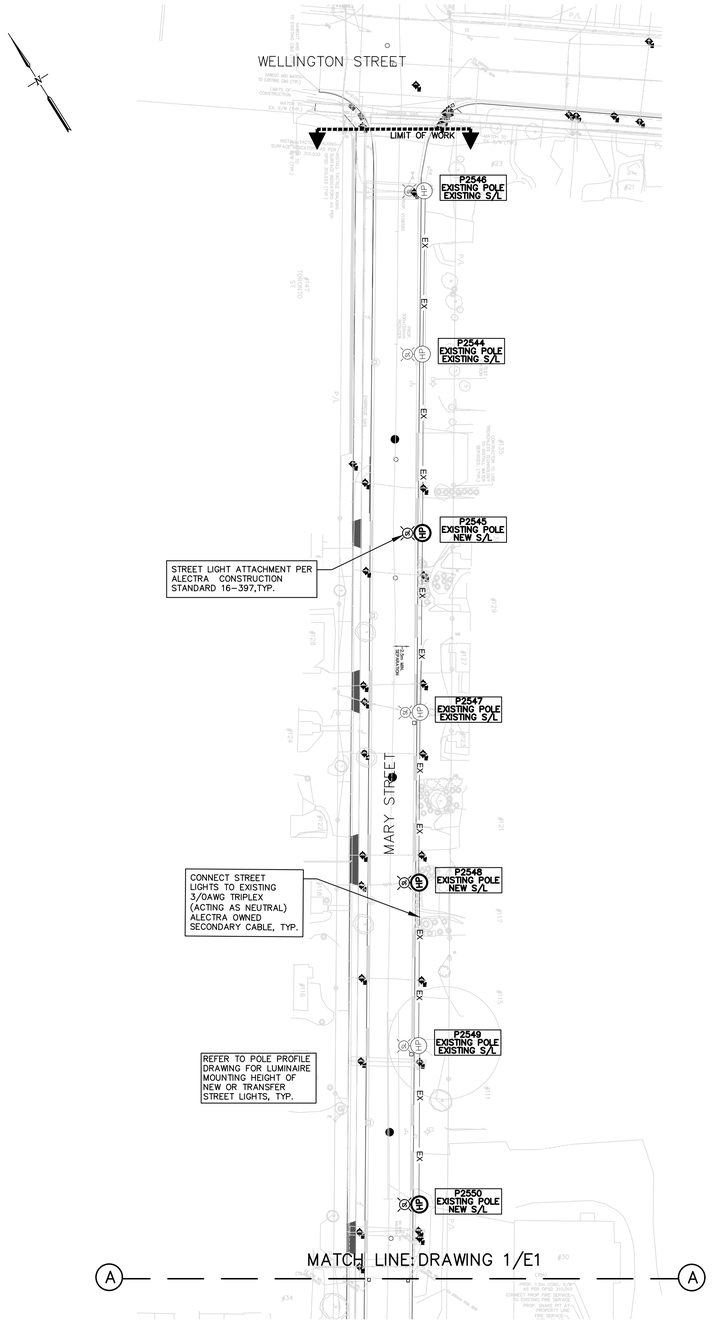
Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

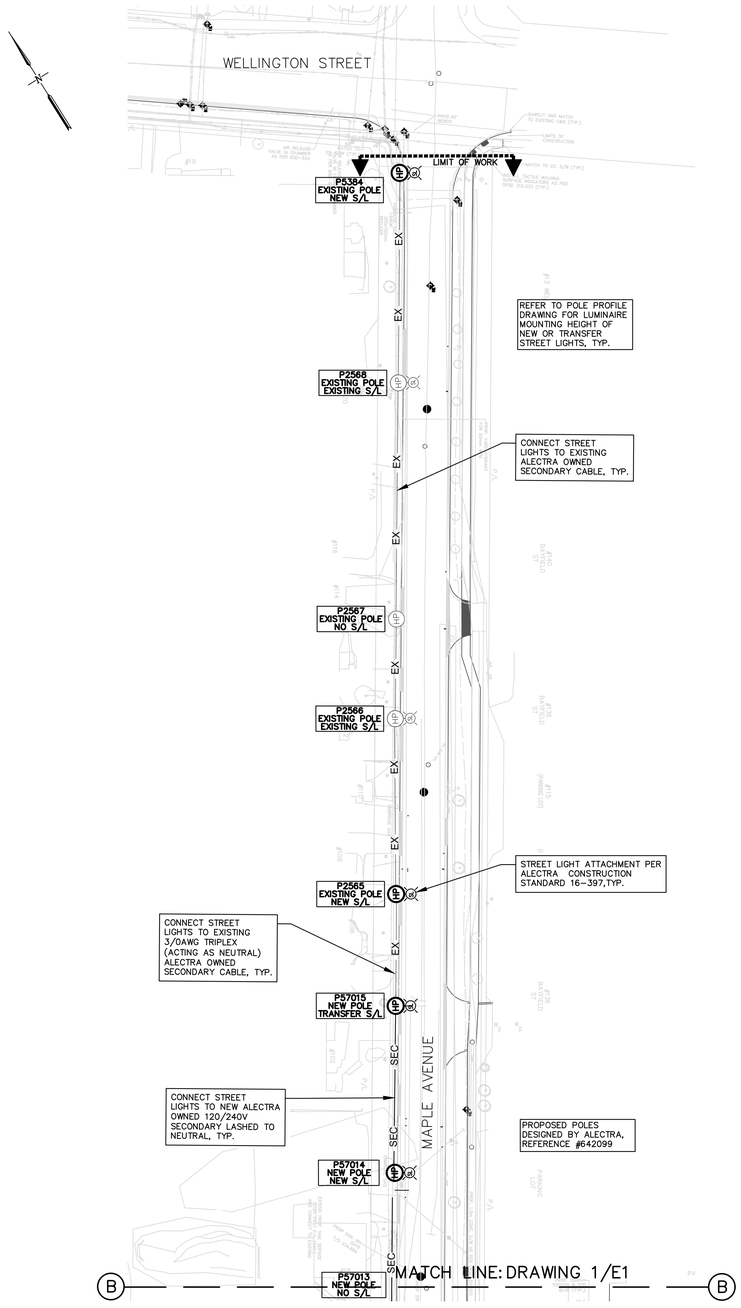
Drawing Title
JOINT USE LAYOUT – SOPHIA STREET

Drawn By	Checked By	Drawing No.
RJW	AD	E1
Scale	Project No.	
AS SHOWN	121268	



1 E2 **MARY STREET**

SCALE – 1:500



2 E2 **MAPLE STREET**

SCALE – 1:500

STANDARD ELECTRICAL LEGEND

SL	TRANSFER EXISTING STREET LIGHT TO NEW POLE
SEC	EXISTING ALECTRA OWNED OVERHEAD SECONDARY
TYP.	TYPICAL
PXX HP	EXISTING POWER POLE WITH TAG NUMBER
SL HP	EXISTING POWER POLE AND STREETLIGHT

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444-2565
www.tathameng.com

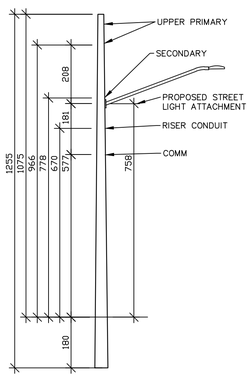
Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

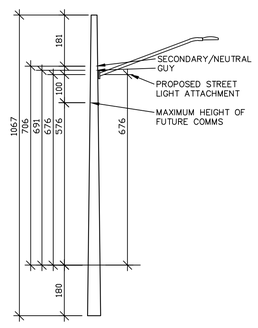
Drawing Title
JOINT USE LAYOUT – MARY ST. AND MAPLE AVE.

Drawn By	Checked By	Drawing No.
RJW	AD	E2
Scale: AS SHOWN	Project No. 121268	



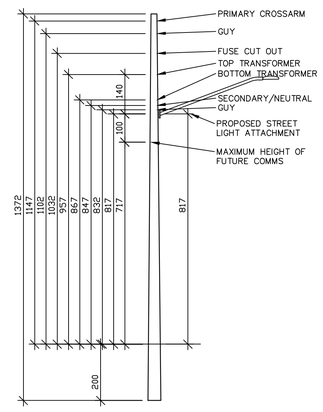
POLE P2555 – 40' CLASS 4 –INSTALLED ????

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON MEASUREMENTS USING LASERTECH TRUPULSE 200X
- PROPOSED STREET LIGHT BRACKET DOES NOT MEET SAFE LIMITS OF APPROACH (3.0m) FROM PRIMARY EQUIPMENT. ONLY QUALIFIED PERSONNEL TO COMPLETE WORK
- POLE INSTALLED BEFORE CURRENT ALECTRA CONSTRUCTION STANDARD ISSUED. POLE DIMENSIONS SHOWN BASED ON 05–103 FOR ILLUSTRATION.



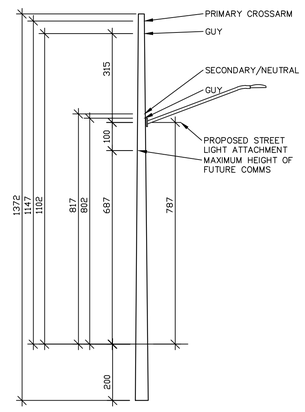
POLE P57009 – 35' CLASS 2 – PROPOSED

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON ALECTRA CONSTRUCTION STANDARDS
- PROPOSED POLES ALECTRA DESIGN REFERENCE #642099



POLE P57010 – 45' CLASS 1 – PROPOSED

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON ALECTRA CONSTRUCTION STANDARDS
- PROPOSED STREET LIGHT BRACKET DOES NOT MEET SAFE LIMITS OF APPROACH (3.0m) FROM PRIMARY EQUIPMENT. ONLY QUALIFIED PERSONNEL TO COMPLETE WORK
- PROPOSED POLES ALECTRA DESIGN REFERENCE #642099



POLE P57012 – 45' CLASS 1 – PROPOSED

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON ALECTRA CONSTRUCTION STANDARDS
- PROPOSED POLES ALECTRA DESIGN REFERENCE #642099

1 / P1

SOPHIA STREET POLE PROFILES

NTS

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive
Suite 200
Collingwood, ON L9Y 5A6
(705) 444–2565
www.tathameng.com

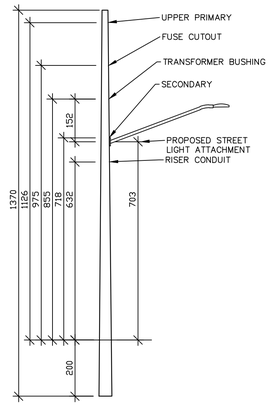
Client
CITY OF BARRIE

70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

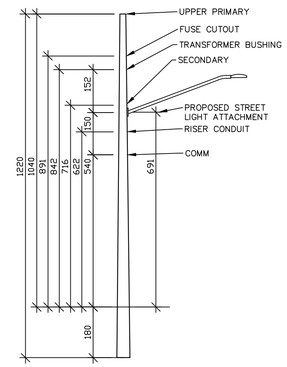
Drawing Title
JOINT USE POLE PROFILES – SOPHIA STREET

Drawn By	Checked By	Drawing No.
RJW	AD	P1
Scale	Project No.	
AS SHOWN	121268	



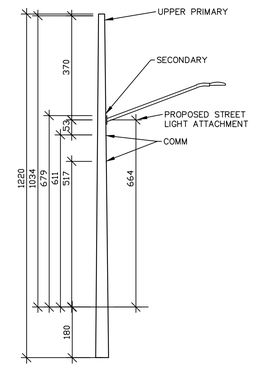
POLE P2550 – 45' CLASS 3 –INSTALLED 2002

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON MEASUREMENTS USING LASERTECH TRUPULSE 200X
- PROPOSED STREET LIGHT BRACKET DOES NOT MEET SAFE LIMITS OF APPROACH (3.0m) FROM PRIMARY EQUIPMENT. ONLY QUALIFIED PERSONNEL TO COMPLETE WORK
- POLE INSTALLED BEFORE CURRENT ALECTRA CONSTRUCTION STANDARD ISSUED. POLE DIMENSIONS SHOWN BASED ON 05–103 FOR ILLUSTRATION.



POLE P2548 – 40' CLASS 4 –INSTALLED ????

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON MEASUREMENTS USING LASERTECH TRUPULSE 200X
- PROPOSED STREET LIGHT BRACKET DOES NOT MEET SAFE LIMITS OF APPROACH (3.0m) FROM PRIMARY EQUIPMENT. ONLY QUALIFIED PERSONNEL TO COMPLETE WORK
- POLE INSTALLED BEFORE CURRENT ALECTRA CONSTRUCTION STANDARD ISSUED. POLE DIMENSIONS SHOWN BASED ON 05–103 FOR ILLUSTRATION.

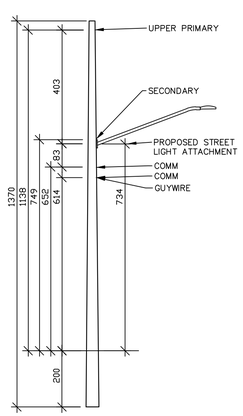


POLE P2545 – 40' CLASS 3 –INSTALLED 2004

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON MEASUREMENTS USING LASERTECH TRUPULSE 200X
- CONTRACTOR TO INSTALL GROUNDING AS PER CSA C22.3 NO1–15 5.10.1.2
- POLE INSTALLED BEFORE CURRENT ALECTRA CONSTRUCTION STANDARD ISSUED. POLE DIMENSIONS SHOWN BASED ON 05–103 FOR ILLUSTRATION.
- EXISTING COMMUNICATION CABLE WITHIN 1.0m OF EXISTING SECONDARY

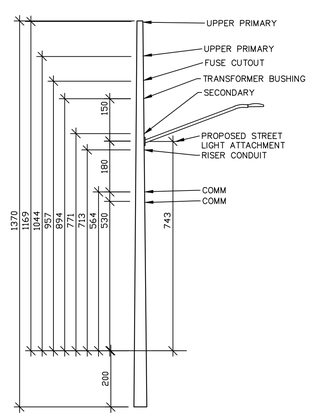
1 P2 MARY STREET POLE PROFILES

NTS



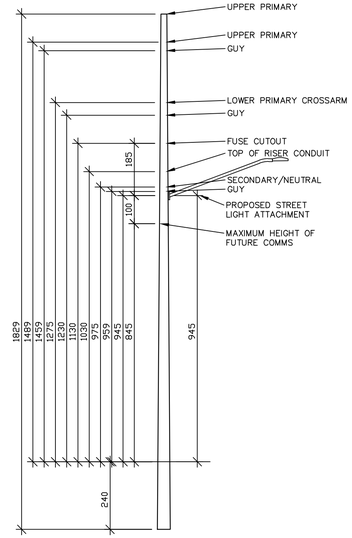
POLE P5384 – 55' CLASS 3 –INSTALLED ????

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON MEASUREMENTS USING LASERTECH TRUPULSE 200X
- POLE INSTALLED BEFORE CURRENT ALECTRA CONSTRUCTION STANDARD ISSUED. POLE DIMENSIONS SHOWN BASED ON 05–103 FOR ILLUSTRATION.
- CONTRACTOR TO INSTALL GROUNDING AS PER CSA C22.3 NO1–15 5.10.1.2
- EXISTING COMMUNICATION CABLE WITHIN 1.0m OF EXISTING SECONDARY



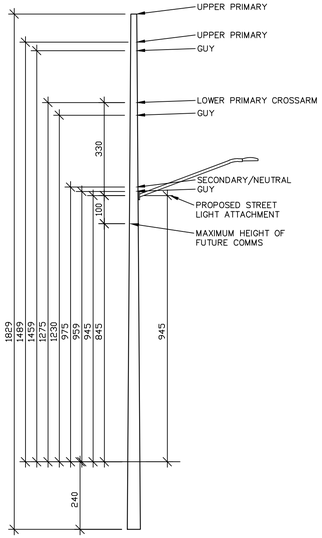
POLE P2565 – 45' CLASS 3 –INSTALLED 2003

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON MEASUREMENTS USING LASERTECH TRUPULSE 200X
- PROPOSED STREET LIGHT BRACKET DOES NOT MEET SAFE LIMITS OF APPROACH (3.0m) FROM PRIMARY EQUIPMENT. ONLY QUALIFIED PERSONNEL TO COMPLETE WORK
- POLE INSTALLED BEFORE CURRENT ALECTRA CONSTRUCTION STANDARD ISSUED. POLE DIMENSIONS SHOWN BASED ON 05–103 FOR ILLUSTRATION.



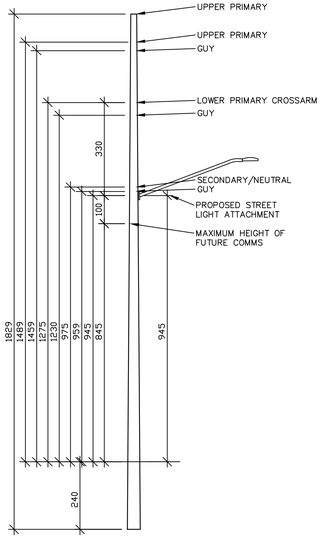
POLE P57015 – 60' CLASS 1 – PROPOSED

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON ALECTRA CONSTRUCTION STANDARDS
- PROPOSED POLES ALECTRA DESIGN REFERENCE #642099
- PROPOSED STREET LIGHT BRACKET DOES NOT MEET SAFE LIMITS OF APPROACH (3.0m) FROM PRIMARY EQUIPMENT. ONLY QUALIFIED PERSONNEL TO COMPLETE WORK



POLE P57014 – 60' CLASS 1 – PROPOSED

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON ALECTRA CONSTRUCTION STANDARDS
- PROPOSED POLES ALECTRA DESIGN REFERENCE #642099



POLE P57011 – 60' CLASS 1 – PROPOSED

- NTS, DISTANCE IN CM
- ATTACHMENT HEIGHTS BASED ON ALECTRA CONSTRUCTION STANDARDS
- PROPOSED POLES ALECTRA DESIGN REFERENCE #642099

2 P2 MAPLE AVENUE POLE PROFILES

NTS

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.

2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.

3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

4. Drawing revision must be note "Issued For Construction" before any work commences.

5. Architectural dimensions are approximate. Location of items shown or specified that are not fixed by dimensions are approximate only. The exact locations necessary to secure the best conditions and results must be determined on site. Review all revisions with the consultant.

Certificate of Approval

The installation work covered by this document meets the safety requirements of Section 4 of the Ontario Regulation 22/04 – Electrical Distribution Safety (Electricity Act, 1998).

Andrew Dixon	10/13/2022
Name	Date
	P.Eng
Signature & Professional Designation	

LICENSED PROFESSIONAL ENGINEER
A.DIXON
100223176
17JAN'24
PROVINCE OF ONTARIO

No.	ISSUE OR REVISION	DATE DD/MM/YY	ISSUER
1	ISSUED FOR 90% DESIGN REVIEW TO CITY	28/09/21	AD
2	ISSUED FOR 100% DESIGN REVIEW TO CITY	22/10/21	AD
3	ISSUED TO ALECTRA FOR JUA REV 1	27/01/22	AD
4	ISSUED TO ALECTRA FOR JUA REV 2	07/03/22	AD
5	UPDATED PER REVISED ALECTRA DESIGN. ISSUE FOR JUA REV 3	12/05/22	AD
6	ISSUED TO ALECTRA FOR JUA REV 4	10/13/22	AD
7	UPDATE PER CITY	17/01/24	AD

RUNGE ENGINEERING

Runge Engineering, A Division of Tatham Engineering Limited
115 Sanford Fleming Drive (705) 444–2565
Suite 200 www.tathameng.com
Collingwood, ON L9Y 5A6

Client
CITY OF BARRIE

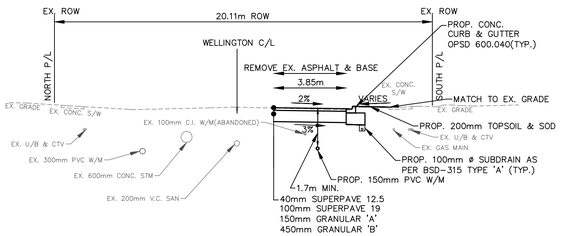
70 Collier,
BARRIE, ON
L4M 1G8

Project Name
QUEEN'S PARK NEIGHBORHOOD STREET LIGHTING & JOINT USE

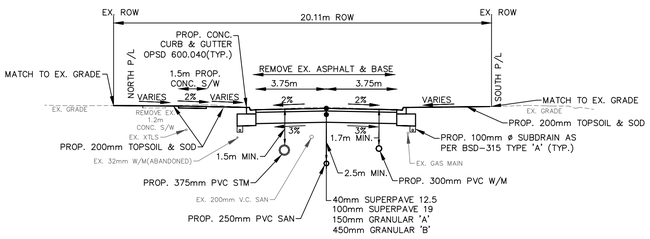
Drawing Title
JOINT USE POLE PROFILES – MARY ST & MAPLE AVE

Drawn By	Checked By	Drawing No.
RJW	AD	P2
Scale	Project No.	
AS SHOWN	121268	

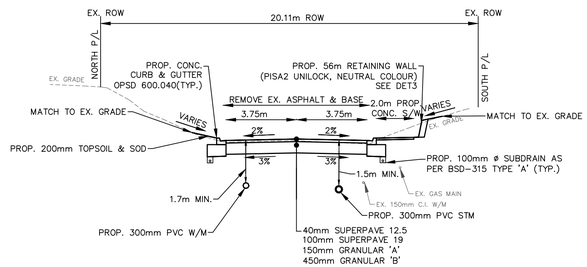
ROAD RECONSTRUCTION
TYPICAL SECTIONS
NTS



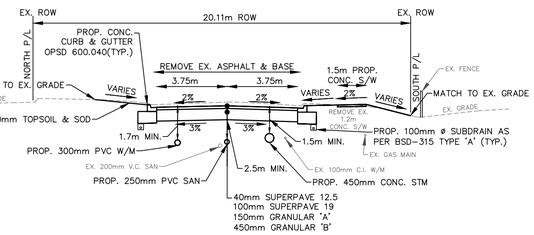
WELLINGTON STREET WEST
STA. 4+060



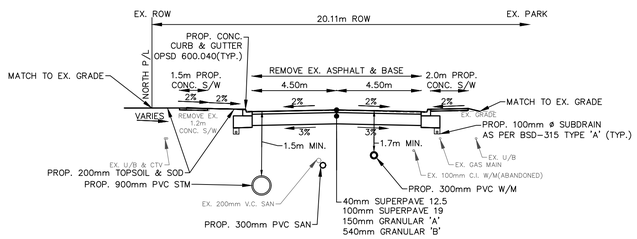
MAPLE AVENUE
STA. 2+160



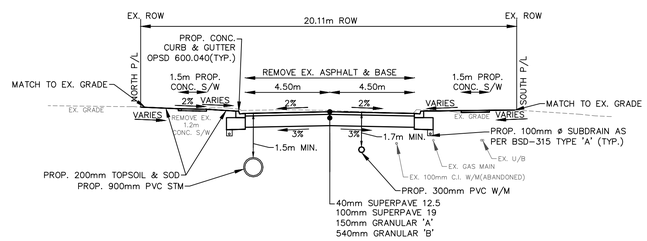
MARY STREET
STA. 3+060



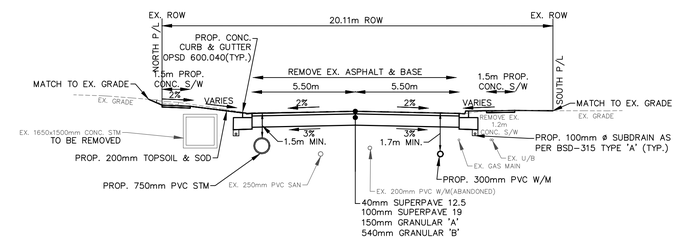
MARY STREET
STA. 3+200



SOPHIA STREET WEST
STA. 1+060



SOPHIA STREET WEST
STA. 1+120



SOPHIA STREET WEST
STA. 1+220

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GRID DISTANCES AND CAN BE CONVERTED TO GROUND DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 1.0003.

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 031910009 (N=4914801.348, E=601584.468)AND 010860410 (N=491,310.3,464, E=606668.620). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD27 (76 ADJUSTMENT).

BENCH MARK V010865470
269.751 – BRASS TABLET SET IN CONCRETE HEADWALL OF UNDERGROUND STORM SEWER ENTRANCE ON WEST SIDE OF FERNDALE DRIVE NORTH, 1.0KM NORTH OF EDGEHILL DRIVE. TABLET IS SET HORIZONTALLY IN EAST FACE OF WESTERLY WALL, 15.0m WEST OF CENTRELINE OF FERNDALE DRIVE NORTH, 44CM SOUTH OF NORTHWEST END AND 37CM BELOW TOP OF CONCRETE WALL.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	01/2020	J.B.
2.	TENDER READY	02/2024	J.B.
3.	ISSUED FOR LSRCA APPROVAL	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK
NEIGHBOURHOOD RENEWAL

TYIPCAL SECTIONS

Barrie
ENGINEERING DEPARTMENT

SCALE HOR.	N/A	VERT.	N/A	CONTRACT NO.	2024–108T
DESIGN	T.F	DRAWN	T.F	SHEET NO.	TYP–1
REVIEWED	A.K	DATE	2024.05.16		

5/21/2024 11:12 AM JASMINE GROSSE TYP SECTIONS.DWG

SITE AND ROAD:	LAYER	BLOCK NAME	DESCRIPTION
T.C.	X-UT-TRAFFIC	SITE_TC-CoB	TRAFFIC CABINET
T.W.A.B.	XMISC	TWAB	TRACER WIRE ACCESS BOX
	XTREES	DSHRUB	DECIDUOUS SHRUBS
	XTREES	CSHRUB	CONIFEROUS SHRUBS
	XTREES	CT1 TO CT15	CONIFEROUS TREE
	XTREES	DT1 TO DT15	DECIDUOUS TREE
	XTREES	STUMP1 TO STUMP15	STUMP
	XTREES		TREE LINE, HEDGE
R.C.S.	XCNRAIL	RCS	RAILWAY CROSSING SIGN
S.B.	XCNRAIL	SB	SIGNAL BOX
	XCNRAIL		RAILWAY TRACKS
G.R.	XBASE		GUIDE RAIL
R.W.	XBASE		RETAINING WALL
WELL	XBASE	WELL	WELL
MON. WELL	XBASE	WELLMON	MONITORING WELL
	XBASE	ROCK	ROCK
	XMISC	WETLAND	WETLAND, SWAMP, MARSH
P.M.	XMISC	PM1	SINGLE PARKING METER
P.M.2	XMISC	PM2	DOUBLE PARKING METER
P.D.	XMISC	PD	PAY AND DISPLAY PARKING PEDESTAL
EX.VAULT	XMISC	MISC_VAULT-CoB	MISCELLANEOUS VAULT
EX.VAULT	X-UT-UHYDRO	MISC_VAULT-CoB	HYDRO VAULT
EX.VAULT	X-UT-UGAS	MISC_VAULT-CoB	GAS VAULT
EX.VAULT	XTREES	MISC_VAULT-CoB	TREE VAULT
BH.2	BH	MISC_BH-CoB	BORE HOLE
	XMISC	SIGN-CoB	SIGN POST (SPECIFY)
	XMISC	MISC_POLE-CoB	MISC. POLE (EG// CLOTHESLINE)
G.W.	XMISC	MISC_GW-CoB	GUY WIRE
S.S.	XBASE	SS	STOP SIGN
T.S.	XBASE	TS	TRAFFIC SIGN
POST	XBASE	POST	POSTS

SURVEY:	LAYER	BLOCK NAME	DESCRIPTION
M.S.	XSURV	UTIL_MS-CoB	MONUMENT SIGN
S.I.B.	XSURV	SIB	STANDARD IRON BAR,
S.S.I.B.	XSURV	SSIB	SHORT STANDARD IRON BAR
C.M.	XSURV	CM	CONCRETE MONUMENT
I.B.	XSURV	IB	IRON BAR
R.I.B.	XSURV	RIB	ROUND IRON BAR
I.P.	XSURV	IP	IRON PIPE
C.C.	XSURV	CC	CUT CROSS
G.S.M. (HORZ.)	XSURV	MONH	GEODETIC SURVEY MONUMENT (HORIZONTAL)
G.B.M. (VERT.)	XSURV	MONV	GEODETIC SURVEY MONUMENT (VERTICAL)
G.S.M. (HORZ.) (VERT.)	XSURV	MONHV	GEODETIC SURVEY MONUMENT (HORIZONTAL AND VERTICAL)
P.I.	XSURV	PI	POINT OF INTERSECTION
STK	XSURVTEMP	PK	STAKE (TEMPORARY)
P.K.	XSURVTEMP	PK	NAIL (TEMPORARY)

EXISTING UTILITIES	LAYER	BLOCK NAME	DESCRIPTION
H.P.	X-UT-HYDRO	UTIL_HP-CoB	HYDRO POLE
B.P.	X-UT-BELL	UTIL_BP-CoB	BELL POLE
B.B.	X-UT-BELL	UTIL_BB-CoB	BELL PEDESTALS
H.B.	X-UT-HYDRO	UTIL_HB-CoB	HYDRO BOX
CTV.B.	X-UT-CTV	UTIL_CTV-CoB	CABLE TV BOX
U.MH.	X-UT-MISC	UTIL_UMH-CoB	UTILITY MAINTENANCE HOLE (OTHER)
T.L.	X-UT-HYDRO	UTIL_TL-CoB	TRAFFIC LIGHT
H.MH.	X-UT-HYDRO	UTIL_HMH-CoB	HYDRO MAINTENANCE HOLE
E.M.H.	X-UT-HYDRO	UTIL_EMH-CoB	ELECTRICAL MAINTENANCE HOLE (TRAFFIC LIGHTS)
B.MH.	X-UT-BELL	UTIL_BMH-CoB	BELL MAINTENANCE HOLE
G.V.	X-UT-GAS	UTIL_GV-CoB	GAS VALVE
G.S.	X-UT-GAS	UTIL_GS-CoB	GAS SIGN
B.S.	X-UT-BELL	UTIL_BS-CoB	BELL SIGN
L.P.	X-UT-HYDRO	UTIL_LP-CoB	LIGHT POLE

PROPOSED WATER	LAYER	BLOCK NAME	DESCRIPTION
	WATER	WTR_P_HYD-CoB	HYD
	WATER	WTR_P_WV-CoB	WV
	WATER	WTR_P_CS-CoB	CS
	WATER	WTR_P_REDUCER-CoB	REDUCER
	WATER	WTR_P_CAP-CoB	CAP
	WATER	WTR_P_CROSS-CoB	CROSS
	WATER	WTR_P_TEE-CoB	TEE
	WATER	WTR_P_SPRINKLER-CoB	SPRINKLER
PROP. FIRE HYDRANT STA. 0+035.4 FLANGE ELEV. 227.52	WATER	PHYD-PROF	FIRE HYDRANT (IN PROFILE) (1 : 250 HORZ. – 1 :50 VERT.)
	WATER	ANODE	ANODE
	WATER	TEST STATION	TEST STATION

EXISTING WATER	LAYER	BLOCK NAME	DESCRIPTION
	XWATER	WTR_X_HYD-CoB	HYD
	XWATER	WTR_X_WV-CoB	WV
	XWATER	WTR_X_CS-CoB	CS
	XWATER	WTR_X_REDUCER-CoB	REDUCER
	XWATER	WTR_X_CAP-CoB	CAP
	XWATER	WTR_X_CROSS-CoB	CROSS
	XWATER	WTR_X_TEE-CoB	TEE
	XWATER	WTR_X_SPRINKLER-CoB	SPRINKLER

PROPOSED STORM	LAYER	BLOCK NAME	DESCRIPTION
PROP.STM. MH DD	STMMH	STM_P_MH-CoB	STORM MAINTENANCE HOLE
PROP.STM. CB.MH DD	STMMH	STM_P_CBMH-CoB	DOUBLE CATCH BASIN MAINTENANCE HOLE
PROP.STM. CB DD	STMMH	STM_P_CB-CoB	CATCH BASIN
PROP.STM. DCB DD	STMMH	STM_P_DCB-CoB	DOUBLE CATCH BASIN
PROP.STM. RL.CB DD	STMMH	STM_P_RLCB-CoB	REAR LOT CATCH BASIN
PROP.STM. RL.DCB DD	STMMH	STM_P_RLDCB-CoB	REAR LOT DOUBLE CATCH BASIN
PROP.STM. DCB.MH DD	STMMH	STM_P_DCBMH-CoB	DOUBLE CATCH BASIN MAINTENANCE HOLE
PROP.STM. DI DD	STMMH	STM_P_DI-CoB	DITCH INLET
PROP.STM. DDI DD	STMMH	STM_P_DDI-CoB	DOUBLE DITCH INLET
PROP.STM. DI.MH DD	STMMH	STM_P_DIMH-CoB	DITCH INLET MAINTENANCE HOLE
PROP.STM. DDI.MH DD	STMMH	STM_P_DDIMH-CoB	DOUBLE DITCH INLET MAINTENANCE HOLE
PROP.STM. CO	STMMH	STM_P_CO-CoB	CLEAN OUT
	STMMH	STM_P_CAP-CoB	CAP
PROP. HW DD	STMMH	STM_P_HEADWALL-CoB	HEADWALL INLET/OUTLET
PROP. ROOF DRAIN	STMMH	STM_P_ROOFDRAIN-CoB	ROOF AREA DRAIN
PROP. OGS DD	STMMH	STM_P_OILGRIT-CoB	OIL GRIT DEVICE

PROPOSED SANITARY	LAYER	BLOCK NAME	DESCRIPTION
PROP.SAN. MH SA	SANMH	SAN_P_MH-CoB	SANITARY MAINTENANCE HOLE
CO	SANS	SAN_P_CLEANOUT-CoB	SANITARY SERVICE CLEAN-OUT
PLUG	SANMH	SAN_P_PLUG-CoB	PLUG
CAP	SANMH	SAN_P_CAP-CoB	CAP
CHECKVALVE	SANMH	SAN_P_BACKFLOW-CoB	BACKFLOW PREVENTION

EXISTING STORM	LAYER	BLOCK NAME	DESCRIPTION
EX.STM MH DD	XSTMMH	STM_X_MH-CoB	MAINTENANCE HOLE
EX. CB.MH DD	XSTMMH	STM_X_CBMH-CoB	DOUBLE CATCH BASIN MAINTENANCE HOLE
EX. CB DD	XSTMMH	STM_X_CB-CoB	CATCH BASIN
EX. DCB DD	XSTMMH	STM_X_DCB-CoB	DOUBLE CATCH BASIN
EX. RL.CB DD	XSTMMH	STM_X_RLCB-CoB	REAR LOT CATCH BASIN
EX. RL.DCB DD	XSTMMH	STM_X_RLDCB-CoB	REAR LOT DOUBLE CATCH BASIN
EX. DCB.MH DD	XSTMMH	STM_X_RL_DCBMH-CoB	DOUBLE CATCH BASIN MAINTENANCE HOLE
EX. DI DD	XSTMMH	STM_X_DI-CoB	DITCH INLET
EX. DDI DD	XSTMMH	STM_X_DDI-CoB	DOUBLE DITCH INLET
EX. DI.MH DD	XSTMMH	STM_X_DIMH-CoB	DITCH INLET MAINTENANCE HOLE
EX. DDI.MH DD	XSTMMH	STM_X_DDIMH-CoB	DOUBLE DITCH INLET MAINTENANCE HOLE
EX. CO	XSTMMH	STM_X_CO-CoB	CLEAN OUT
EX. CAP	XSTMMH	STM_X_CAP-CoB	CAP
EX. HW DD	XSTMMH	STM_X_HEADWALL-CoB	HEADWALL INLET/OUTLET
EX. ROOF DRAIN	XSTMMH	STM_X_ROOFDRAIN-CoB	ROOF AREA DRAIN
EX. OGS DD	XSTMMH	STM_X_OILGRIT-CoB	OIL GRIT DEVICE

EXISTING SANITARY	LAYER	BLOCK NAME	DESCRIPTION
EX.SAN MH SA	XSANMH	SAN_X_MH-CoB	SANITARY MAINTENANCE HOLE
EX. PLUG	XSANMH	SAN_X_PLUG-CoB	PLUG
EX. CAP	XSANMH	SAN_X_CAP-CoB	CAP
EX. CHECK VALVE	XSANMH	SAN_X_BACKFLOW-CoB	BACKFLOW PREVENTION
EX. CO	XSANS	SAN_X_CLEANOUT-CoB	SANITARY SERVICE CLEAN-OUT

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597), AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL), UTM COORDINATES

BENCH MARK V001196BUS02

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	02/2021	J.B.
2.	TENDER READY	01/2024	J.B.
3.	LSRCA SUBMISSION	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILLEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

NOTES AND DETAILS

Barrie

ENGINEERING DEPARTMENT

SCALE HOR. AS NOTED	VERT. AS NOTED	CONTRACT NO.	2024–108T
DESIGN T.F.	DRAWN T.F.	SHEET NO.	DET1
REVIEWED J.B.	DATE 2024.05.16		

5/17/2024 10:22 AM JASMINE GROSSE DETAILS.DWG

GENERAL NOTES

A. ALL WORK TO BE IN ACCORDANCE WITH CURRENT CITY OF BARRIE STANDARDS AND SPECIFICATIONS, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE ENGINEERING DEPARTMENT.
B. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY CITY OF BARRIE STANDARD DRAWINGS (BSD) AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).
C. ALL UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
D. LOCATION OF UNDERGROUND UTILITIES AS PER T2UE UTILITY ENGINEERS.
E. THE CONTRACTOR SHALL CO-ORDINATE WITH THE UTILITY COMPANY FOR UTILITY RELOCATIONS.
F. AT CROSSINGS OF EXISTING UNDERGROUND SERVICES, SUPPORT TO BE PROVIDED.
G. A RIGHT OF WAY ACTIVITY PERMIT IS REQUIRED FROM THE ENGINEERING PRIOR TO THE COMMENCEMENT OF WORK WITHIN ANY CITY RIGHT-OF-WAY.
H. MINIMUM PROPOSED CROSSFALL @ 2.0% UNLESS NOTED OTHERWISE ON THE DRAWINGS.
I. ALL TOPSOIL OR DEBRIS IN THE SUBGRADE TO BE REMOVED.
J. IMMEDIATELY PRIOR TO PLACEMENT OF PAVEMENT GRANULAR COURSES, THE SUBGRADE IS TO BE PROOF ROLLED WITH A HEAVY RUBBER TIRE VEHICLE AND ANY LOOSE, SOFT OR UNSTABLE AREAS TO BE SUBEXCAVATED AND BACKFILLED WITH COMPACTED GRANULAR MATERIAL.
K. GRANULAR BASE FILL TO BE COMPACTED TO A MINIMUM 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
L. ASPHALT MATERIAL TO BE ROLLED AND COMPACTED TO A MINIMUM 97% BITUMINOUS MIX BULK DENSITY.
M. EXISTING SUBGRADE TO BE COMPACTED TO A MINIMUM 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
N. THE CONTRACTOR SHALL USE APPROVED TRENCH BOX AND/OR POLE SUPPORT WHEN WORKING WITHIN 1m OF ALL POLES.
O. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE ON THE SITE DURING CONSTRUCTION.
P. ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE CITY ENGINEERING DEPARTMENT.
Q. ALL EXISTING TREES TO BE PROTECTED AS PER BSD-1232 DURING CONSTRUCTION.
R. ALL SILT CONTROL AND EROSION PROTECTION DEVICES ARE TO BE IN PLACE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND THE GRASS HAS ESTABLISHED GROWTH, SUBJECT TO APPROVAL BY THE CITY ENGINEERING DEPARTMENT.
S. COMPACTION OF BACKFILL TO BE ACHIEVED TO 95% STANDARD DRY PROCTOR DENSITY FOR NATIVE MATERIAL AND IMPORTED ENGINEERED FILL.

GENERAL NOTES – ROADWORKS

A. CURB WITH STANDARD GUTTER TO COMPLY WITH OPSD 600.040.
B. SIDEWALKS TO COMPLY WITH OPSD 310.010 AND ARE TO MATCH EXISTING THICKNESS. SIDEWALK RAMPS AT CROSSWALKS TO COMPLY WITH OPSD 310.030.
C. NATIVE SUBGRADE SHALL HAVE A CROSSFALL OF 3% AND THE MATERIAL SHALL BE APPROVED BY A SOILS CONSULTANT AND IS SUBJECT TO APPROVAL BY THE CONTRACT ADMINISTRATOR.
D. NATIVE SUBGRADE TO BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR MAXIMUM DRY DENSITY AND SHALL BE PROOF ROLLED.
E. GRADE AND CROSS FALL ADJUSTMENT OF MAINTENANCE HOLE AND CATCH BASIN FRAMES WILL BE MADE USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE. THE TOP ADJUSTMENT UNIT OF ALL CATCH BASIN AND MAINTENANCE HOLES SHALL BE RUBBER.
F. ADJUSTMENT UNITS MUST BE CERTIFIED TO MEET ALL PERTINENT OPS, CSA, ASTM AND MTO-DSM LIST, OR OTHER INDUSTRY GUIDELINES FOR MATERIALS, PERFORMANCE AND USE AS APPLICABLE. ADJUSTMENT UNITS SHALL BE INSTALLED AS PER BSD-41.
G. ADJUSTMENT UNITS AND JOINTS WILL BE SEALED AND OR PARGED IN COMPLIANCE WITH MANUFACTURERS SPECIFICATIONS AND GUIDELINES.
H. MORTAR IS USED FOR LEVELING OF PRECAST UNITS ONLY. THE THICKNESS OF MORTAR WILL BE 10mmø TO FILL ALL VOIDS CREATED BY IRREGULARITIES IN THE PRECAST UNITS TO ENSURE AN EVEN SURFACE ONLY.
I. NON-COMPRESSIBLE BACK FILL WILL BE USED DURING REBUILDING, ADJUSTING, OR ANY OTHER APPLICABLE CATCH BASIN OR MAINTENANCE HOLE WORKS.

SIMCOE COUNTY SEED MIX

A. SIMCOE COUNTY NATIVE MIX IS APPLIED AT A RECOMMENDED RATE OF 25Kg/Ha AND IS USED IN CONJUNCTION WITH THE APPLICATION OF AN ANNUAL RYE NURSE CROP APPLIED AT A RATE OF 12Kg/Ha.
B. SEEDING SHALL OCCUR AFTER THE PLACEMENT OF THE TOPSOIL. IF THE SEEDING OCCURS DURING THE DROUGHT PRONE SEASON (JUNE THROUGH AUGUST) UNLESS ADEQUATE IRRIGATION CAN BE SUPPLIED, APPLY A MINIMUM OF 5cm OF TOPSOIL TO THE DISTURBED AREA PRIOR TO SEEDING.

SIMCOE COUNTY SEED MIX		% OF MIX
Canada Wild Rye	*Elymus canadensis*	20
Indian Grass	*Sorghastrum nutans*	20
Sand Drop Seed	*Sporobolus cryptandrus*	20
Little Bluestem	*Schizachyrium scoparium*	15
Black Eyed Susan	*Rudbeckia hirta*	12
Common Milkweed	*Asclepias syriaca*	5
Canada Goldenrod	*Solidago canadensis*	4
New England Aster	*Symphyotrichum novae-angliae*	2
Smooth Blue Aster	*Aster laevis*	1
Wild Bergamot	*Monarda fistulosa*	1

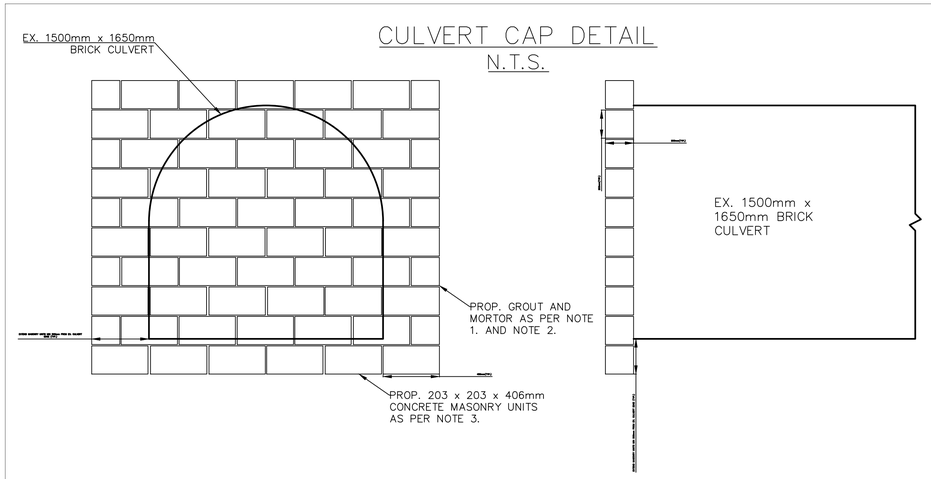
GENERAL NOTES – WATERMAIN

A. CONTRACTOR SHALL INFORM THE CITY OF BARRIE ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE OF THEIR INTENTIONS TO WORK.
B. OPERATION OF FIRE HYDRANTS AND VALVES ON POTABLE WATER BY OTHER THAN WATER OPERATONS DEPARTMENT IS PROHIBITED BY CURRENT BY-LAW. THE CITY WILL SWAB, PRESSURE TEST, CHLORINATE AND FLUSH ALL NEW WATERMAINS.
C. MINIMUM COVER OVER WATERMAIN TO BE 1.7m. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS TO BE 2.5m. WHERE WATERMAIN CONFLICTS WITH SEWER PIPES, DEFLECT WATERMAIN HORIZONTALLY OR VERTICALLY WHILE PROVIDING A MINIMUM OF 0.5m CLEARANCE BETWEEN WATERMAIN AND SEWERS. MAINTAIN MINIMUM DEPTH OF COVER AT ALL TIMES.
D. 1) WATERMAIN SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OPSD 802.010 (GRANULAR 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES UNLESS OTHERWISE APPROVED BY THE CONTRACT ADMINISTRATOR. ALTERNATIVE EMBEDMENT MATERIAL – SAND MEETING GRADATION REQUIREMENTS OF OPSS 1004.05.05 COMPACTED TO 95% PROCTOR DENSITY. GEOTECHNICAL CERTIFICATION OF MATERIAL AND COMPACTION TESTING MUST BE PROVIDED EVERY 150 METRES. THE COMPACTION TESTING MUST INCLUDE THE ENTIRE EMBEDMENT ENVELOPE (HAUNCHES, BEDDING AND TOP OF PIPE).
E. COPPER WATER MAINS AND SERVICES 25mmø TO 50mmø IN DIAMETER SHALL BE EMBEDDED IN SAND 100mmø ABOVE AND BELOW TO CONFORM TO OPSS.MUNI 1004.05.07.
F. RESTRAINING WILL BE REQUIRED ON ALL ALL HYDRANTS. THRUST BLOCKS AS PER OPSD 1103.010 AND 1103.020. RESTRAINING DEVICES MAY BE REQUIRED IN ADDITION TO STANDARD CONCRETE THRUST BLOCKING WHERE SOIL CONDITIONS WARRANT AT THE CITY'S DISCRETION.
G. NEW WATERMAINS TO BE FUSIBLE PVC DR18 CL150 MINIMUM.
H. TRACING WIRE #12 AWG HIGH STRENGTH COPPER CLAD (HS-CSS) AND SHALL BE INSTALLED ON THE TOTAL LENGTH OF ALL WATERMAIN AND BROUGHT UP AT EACH HYDRANT AND CONNECTED TO FLANGE BOLT. ALL CONNECTORS TO UTILIZE CONNECTORS AS PER THE APPROVED MANUFACTURER PRODUCT FOR EACH LINEAR WATER SYSTEMS LIST.
I. ALL WATER SERVICES SHALL BE MINIMUM 25mmø TYPE "K" COPPER OR 25mmø CROSS-LINKED,WITH TRACER WIRE UNLESS NOTED OTHERWISE. POLYETHYLENE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF WATER OPERATIONS. WATER SERVICE SADDLES SHALL BE USED WHEN TAPPING INTO PVC WATERMAIN.
J. SERVICE TAPPINGS SHALL BE PLACED AT A MINIMUM SEPARATION OF 1.0m AND A MINIMUM OF 0.6m FROM JOINTS. (ENDS OF PIPE)
K. RISER PIPES ARE TO BE INSTALLED AS PER BSD-510, AND REMOVED AS DIRECTED. SWABBING SCHEDULE TO BE SUPPLIED BY A CITY OF WATER OPERATIONS REPRESENTATIVE.
L. ALL NEW CURB STOPS AND BOXES TO BE LOCATED AT PROPERTY/EASEMENT LINE AND OUT OF DRIVEWAYS AND SIDEWALKS.

SANITARY SEWERS

A. SEWERS SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OPSD-802.010, (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING.
B. MAXIMUM DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY C.S.A., O.P.S. OR MANUFACTURER'S RECOMMENDED SPECIFICATIONS.
C. PVC, CONCRETE AND PROFILE WALL PVC SEWERS SHALL HAVE RUBBER GASKET TYPE JOINTS AND SHALL BE CERTIFIED TO CONFORM TO ALL APPLICABLE CURRENT C.S.A. SPECIFICATIONS.
D. CONCRETE SANITARY SEWERS SHALL HAVE A MINIMUM STRENGTH OF 50 N/mm/mm CONFORMING TO CSA STANDARD A257.2-1982, CLASS 50-D (PREVIOUSLY C.S.A. STANDARD A257.2-1974, CLASS II).
E. MAINTENANCE HOLE TOPS (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACE. ALL ADJUSTMENT WILL BE ACCORDANCE WITH GENERAL NOTES ROADWORKS (THIS PAGE).
F. ALL CONNECTIONS TO NEW SANITARY MAINS SHALL BE PRE-MANUFACTURED, FABRICATED TEES. CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE MADE WITH APPROVED FACTORY MADE TEES OR INSERTA-TEES IN STRICT ACCORDANCE TO MANUFACTURES GUIDELINES.
G. SANITARY LATERAL CONNECTION TO BE LOCATED AT THE CENTRELINE OF THE LOT.
H. LATERAL TO EXTEND 2.0m PAST PROPERTY LINE WITH CLEANOUT.
I. PIPE TO BE MINIMUM 100 mm DIA. PVC SDR28, RUBBER GASKET TYPE JOINTS AND SHALL CONFORM TO C.S.A. (B-182.2.3.4) (COLOURED) FOR A RESIDENTIAL HOUSE AND 150mm MINIMUM DIA. PVC SDR28 FOR INDUSTRIAL/COMMERCIAL DEVELOPMENT.
J. MINIMUM DEPTH OF LATERAL AT PROPERTY LINE SHALL BE 2.4m MEASURED FROM THE SEWER OBVERT TO FINISHED GROUND SURFACE ELEVATION UNLESS NOTED OTHERWISE.
K. MINIMUM PIPE SLOPE TO BE 2.0%, MAXIMUM 8.0% (SEE OPSD-1006.010, 1006.020).

CULVERT CAP DETAIL
N.T.S.



NOTE 1: GROUT AND MORTOR TO CONFORM TO CSA A179 AND A3002
NOTE 2: MORTOR SHALL BE TYPE S AS PER CSA A179
NOTE 3: CONCRETE MASONRY UNITS SHALL CONFROM TO CSA 165 AND ASTM C90

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS
DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGNAL). UTM COORDINATES

BENCH MARK V0011968U502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864). ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	02/2021	J.B.
2.	TENDER READY	01/2024	J.B.
3.	LSRCA SUBMISSION	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

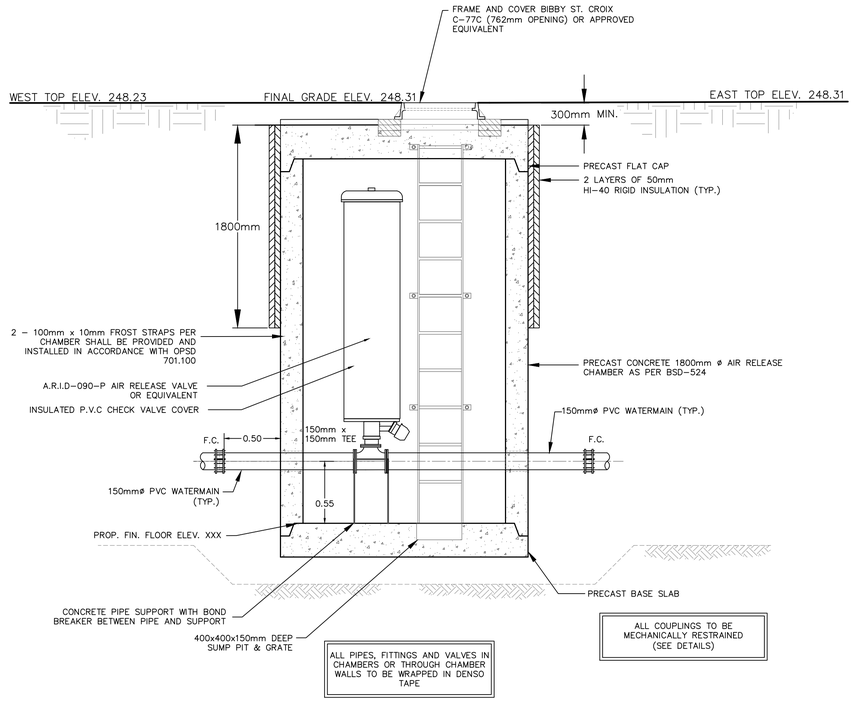
QUEEN'S PARK NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

NOTES AND DETAILS

Barrie
ENGINEERING DEPARTMENT

SCALE HOR. AS NOTED	VERT. AS NOTED	CONTRACT NO. 2024-108T	
DESIGN T.F.	DRAWN T.F.	SHEET NO. DET2	
REVIEWED J.B.	DATE 2024.05.16		

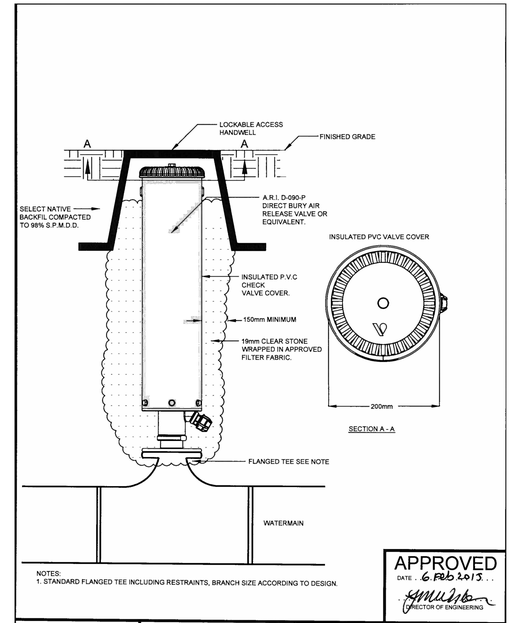
5/17/2024 10:22 AM JASMINE GROSSE DETAILS.DWG



1
DET2

WELLINGTON ST AIR RELEASE CHAMBER SECTION

SCALE: 1:25



NOTES:
1. STANDARD FLANGED TEE INCLUDING RESTRAINTS, BRANCH SIZE ACCORDING TO DESIGN.

APPROVED
DATE . 6 FEB 2015 . .
DIRECTOR OF ENGINEERING

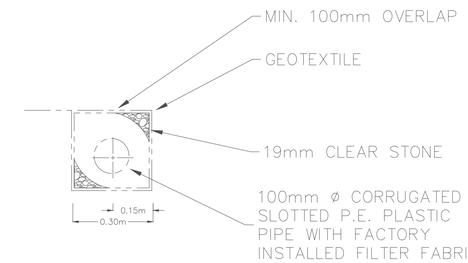
City of BARRIE
STANDARD DETAIL

DIRECT BURY AIR RELEASE VALVE FOR WATERMAIN UP TO 300mm Ø

REV No.	DATE: FEB 2015
1	SCALE: N.T.S.

BSD-517

SUBDRAIN DETAIL FOR DRIVEWAY AND BOULEVARD



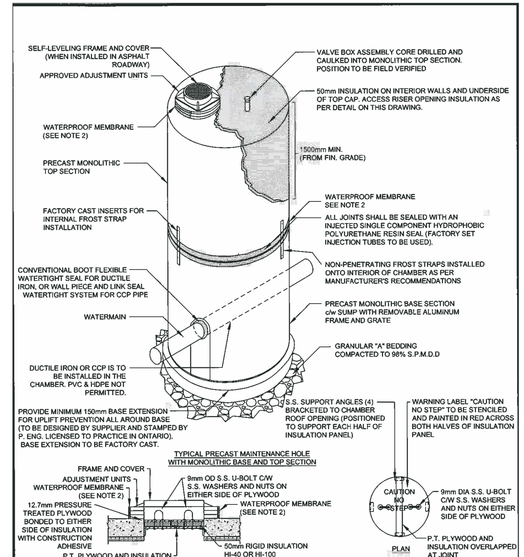
NOTES:
1. ALL CONNECTIONS TO BE MADE ON THE UPSTREAM SIDE OF ALL CATCH BASINS. MORTARED INSIDE AND OUTSIDE.
2. SUBDRAINS TO BE PLUGGED AT THE HIGH END WITH A MANUFACTURED PLUG.
3. SUBDRAIN TRENCH SHALL BE LINED WITH CLASS II, NON-WOVEN GEOTEXTILE, WITH AN F.D.S. OF 75-100μm AND A MINIMUM THICKNESS OF 1mm

UNCOATED 150mm SQUARE STEEL WIRE FABRIC (No 3.8) FOR CONCRETE REINFORCEMENT CONFORMING TO C.S.A G30.5,1998 SHALL BE PLACED IN THE SIDEWALK AND RETAINING WALL. REINFORCING STEEL MAY BE USED AS AN EQUIVALENT

ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

MONOLITHIC CONCRETE SIDEWALK AND RETAINING WALL ON MARY STREET

(N.T.S.)



NOTES:
1. APPLICATION: NON-PRESSURE REDUCING VALVE CHAMBERS ONLY.
2. WATERPROOF MEMBRANE TO EXTEND COMPLETELY AROUND ALL RISER SECTION JOINTS WITH A MINIMUM 300mm WIDE STRIP.
3. ALL INSULATION TO BE RIGID TYPE EXTRUDED POLYSTRENE FOAM (DOW HI-40 OR HI-100. ALL CHAMBERS INSULATION TO BE INSTALLED WITH CONSTRUCTION ADHESIVE AND TAPCON ANCHORS AT MAX. 600mm SPACING IN ALL DIRECTIONS (MIN.2 ANCHORS PER SHEET OF INSULATION).
4. SUMP c/w GRATE TO BE LOCATED AT THE BOTTOM OF THE ACCESS LADDER. SUMP SHALL NOT EXTEND THROUGH THE BOTTOM OF BASE.

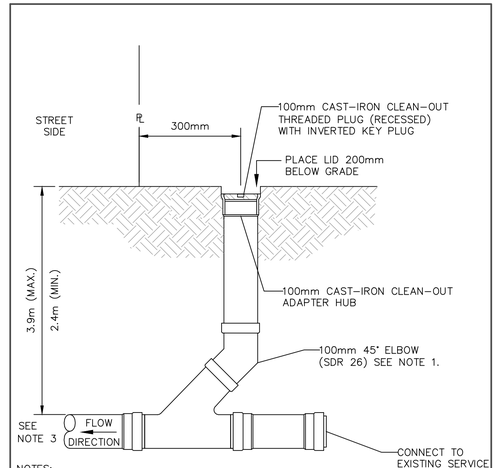
APPROVED
DATE . . Oct. 28/17 . . . .
DIRECTOR OF ENGINEERING

Barrie
STANDARD DETAIL

TYPICAL TWO PIECE CIRCULAR CHAMBER DETAILS FOR WATERMAIN

REV No.	DATE: OCT 2017
2	SCALE: N.T.S.

BSD-524



NOTES:
1. ALL PIPING AND FITTINGS TO BE PVC SDR 26 (MAX. 3.9m DEPTH). OTHERWISE USE SDR 35 FOR GREATER DEPTHS.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.
3. REFER TO OPSD 1006.010 OR OPSD 1006.020 FOR PIPE SLOPE.

CITY OF BARRIE DETAIL: SANITARY SEWER

CLEAN-OUT DETAIL

DATE: FEBRUARY 27, 2014
SCALE: N.T.S.

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS
DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603562.430) AND 01019860463 (N=4916487.812, E=604671.597) AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502
237.275 - COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	02/2021	J.B.
2.	TENDER READY	01/2024	J.B.
3.	LSRCA SUBMISSION	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

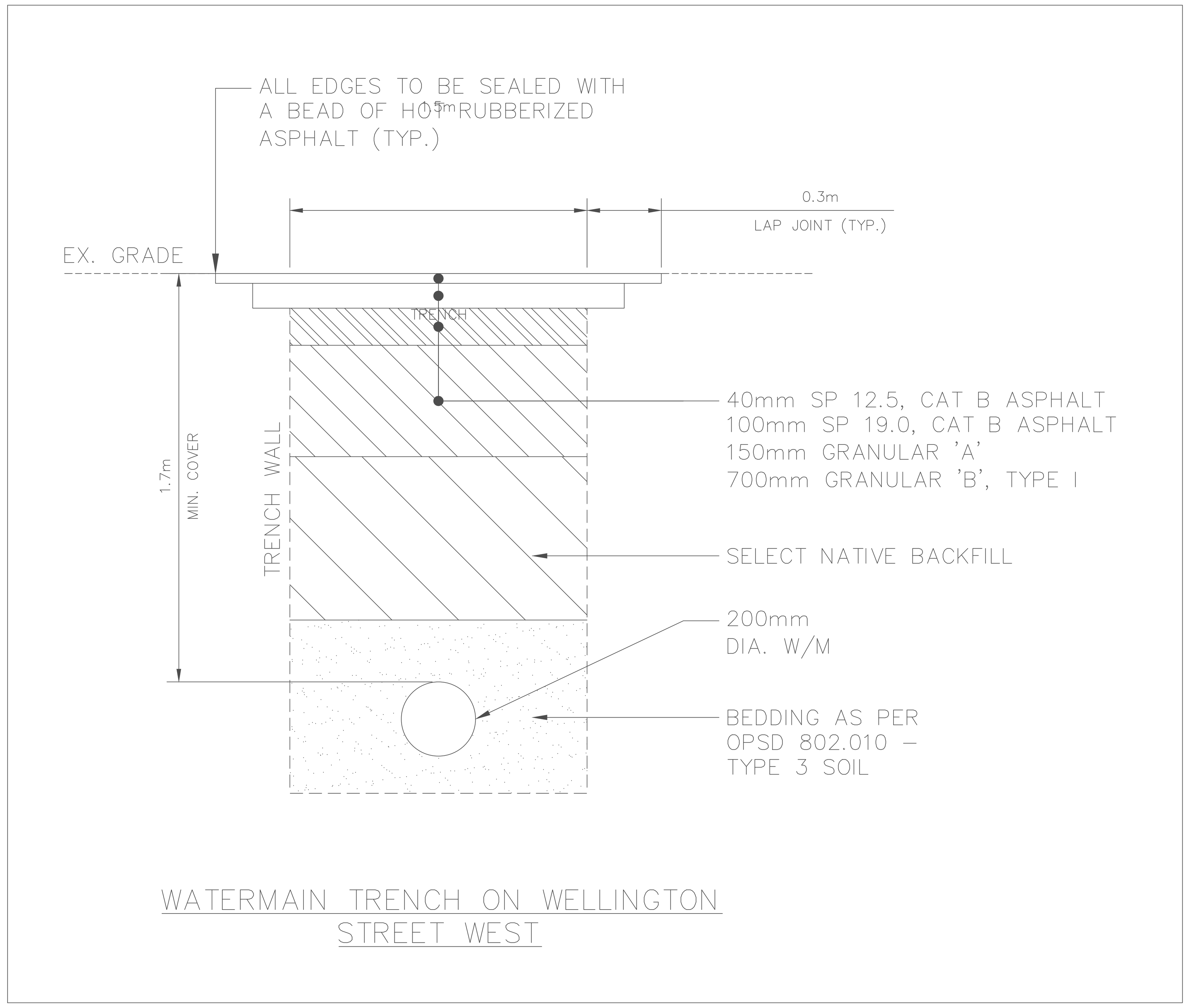
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

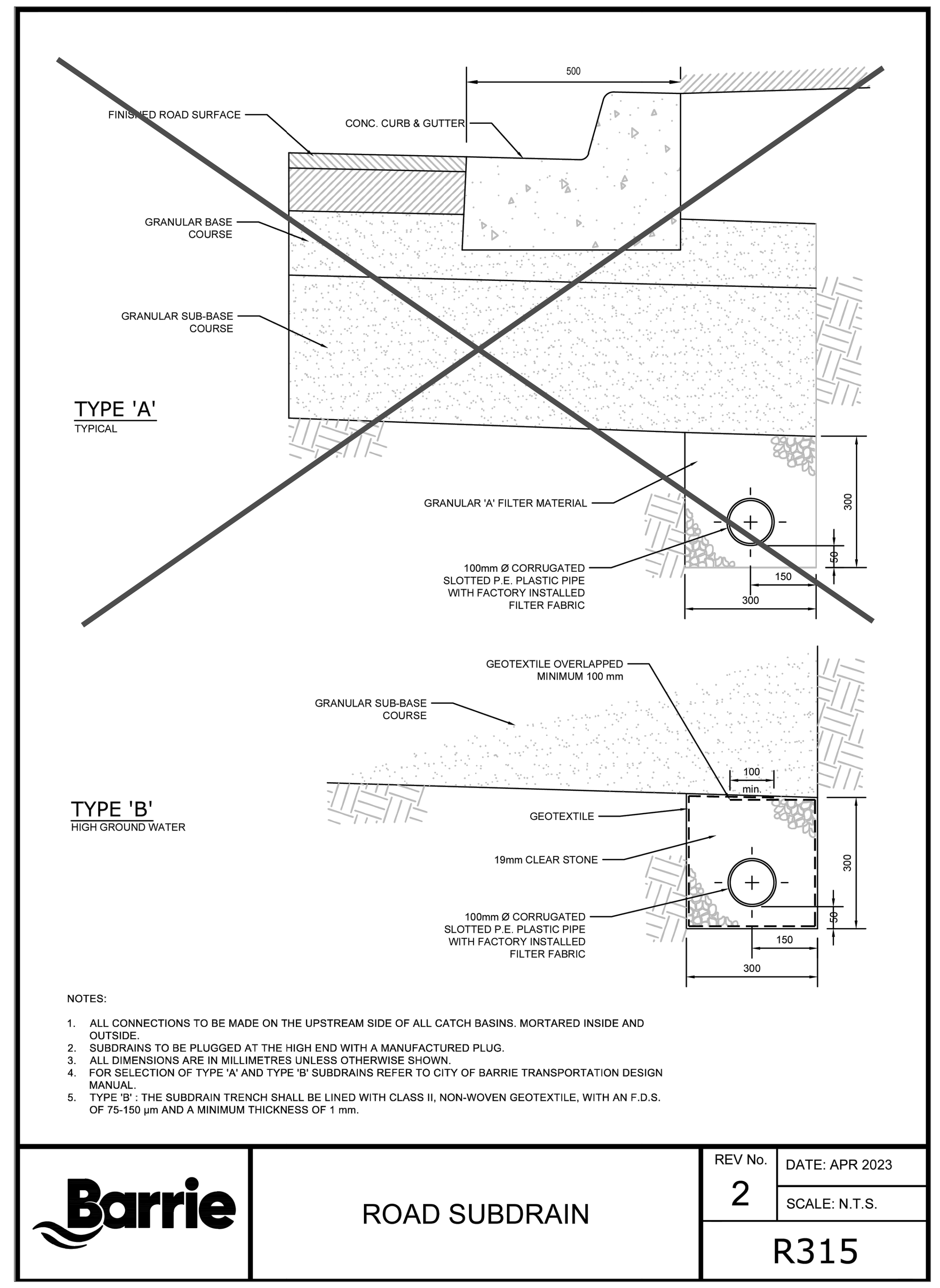
NOTES AND DETAILS

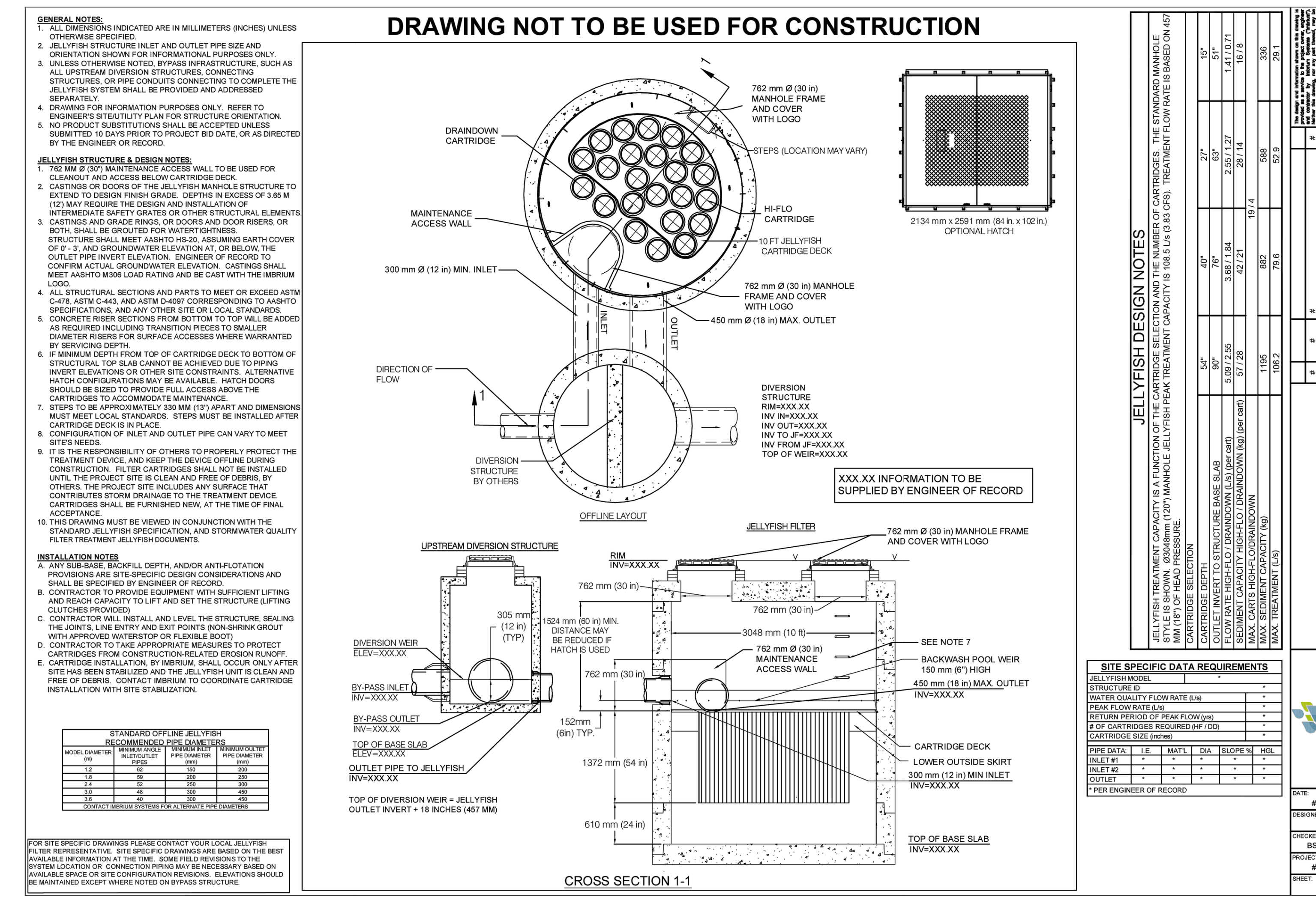
Barrie
ENGINEERING DEPARTMENT

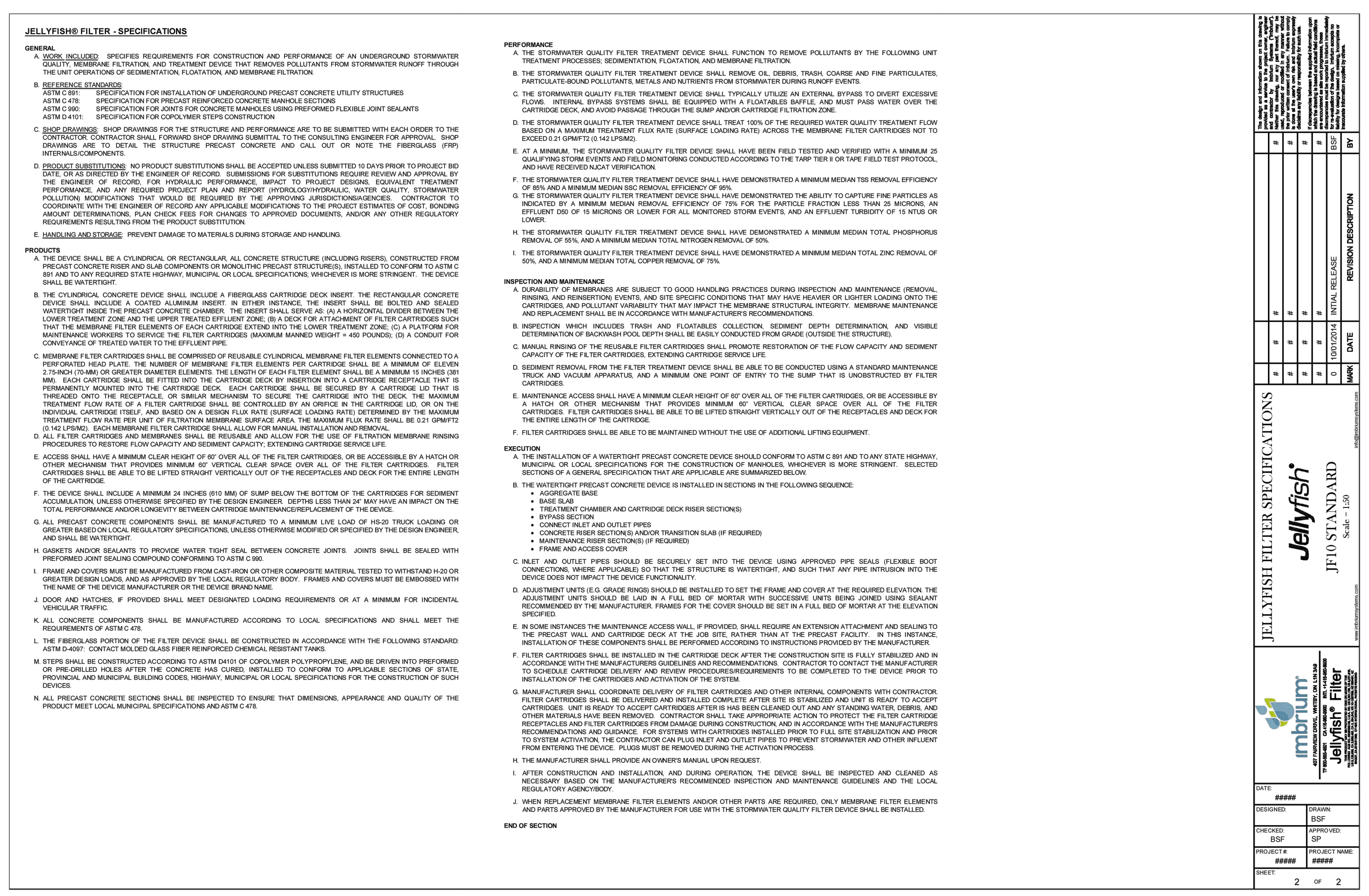
SCALE HOR. AS NOTED	VERT. AS NOTED	CONTRACT NO. 2024-108T
DESIGN T.F.	DRAWN T.F.	SHEET NO.
REVIEWED J.B.	DATE 2024.05.16	DET3

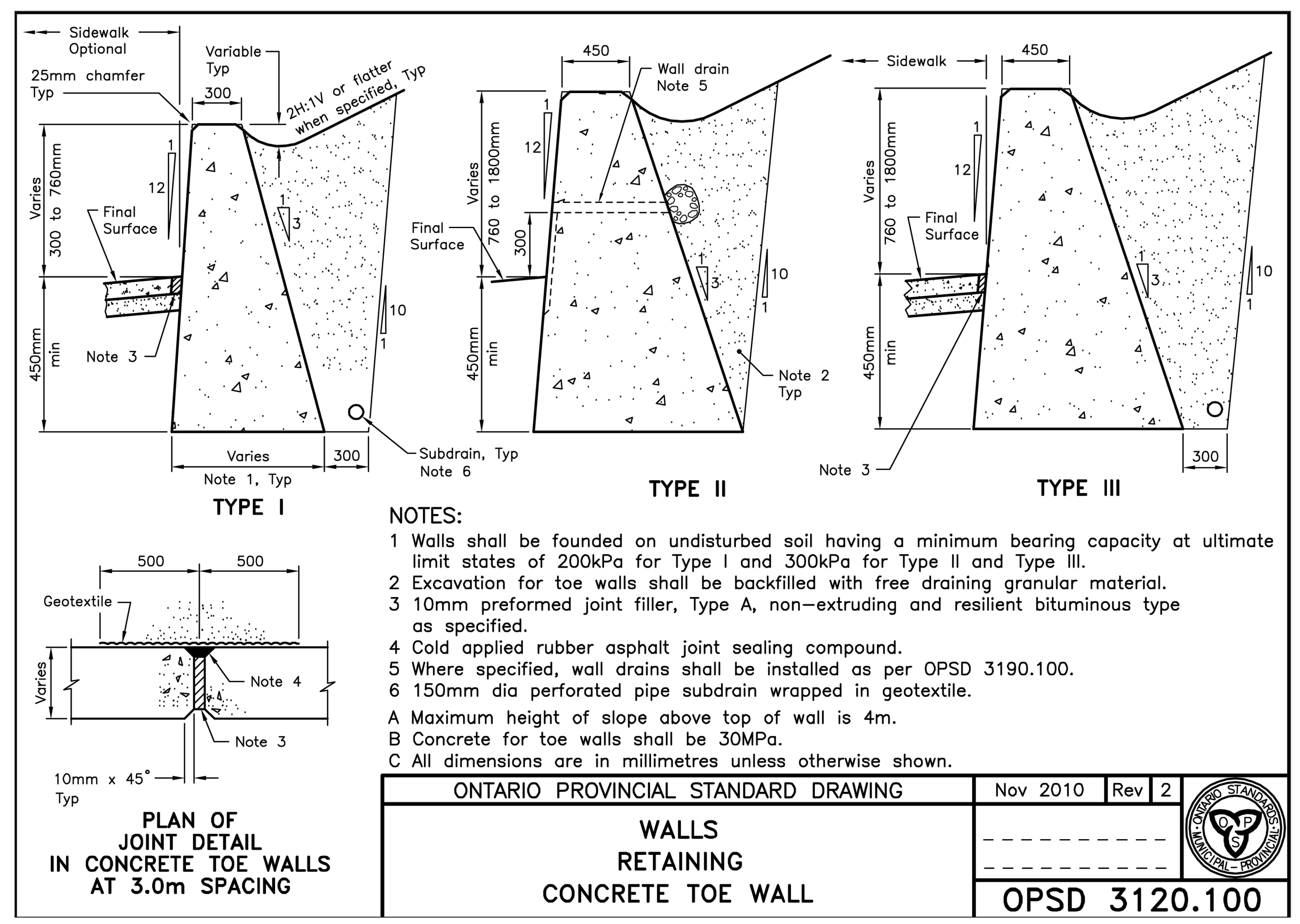
5/17/2024 10:22 AM JASMINE DROSSE DETAILS.DWG



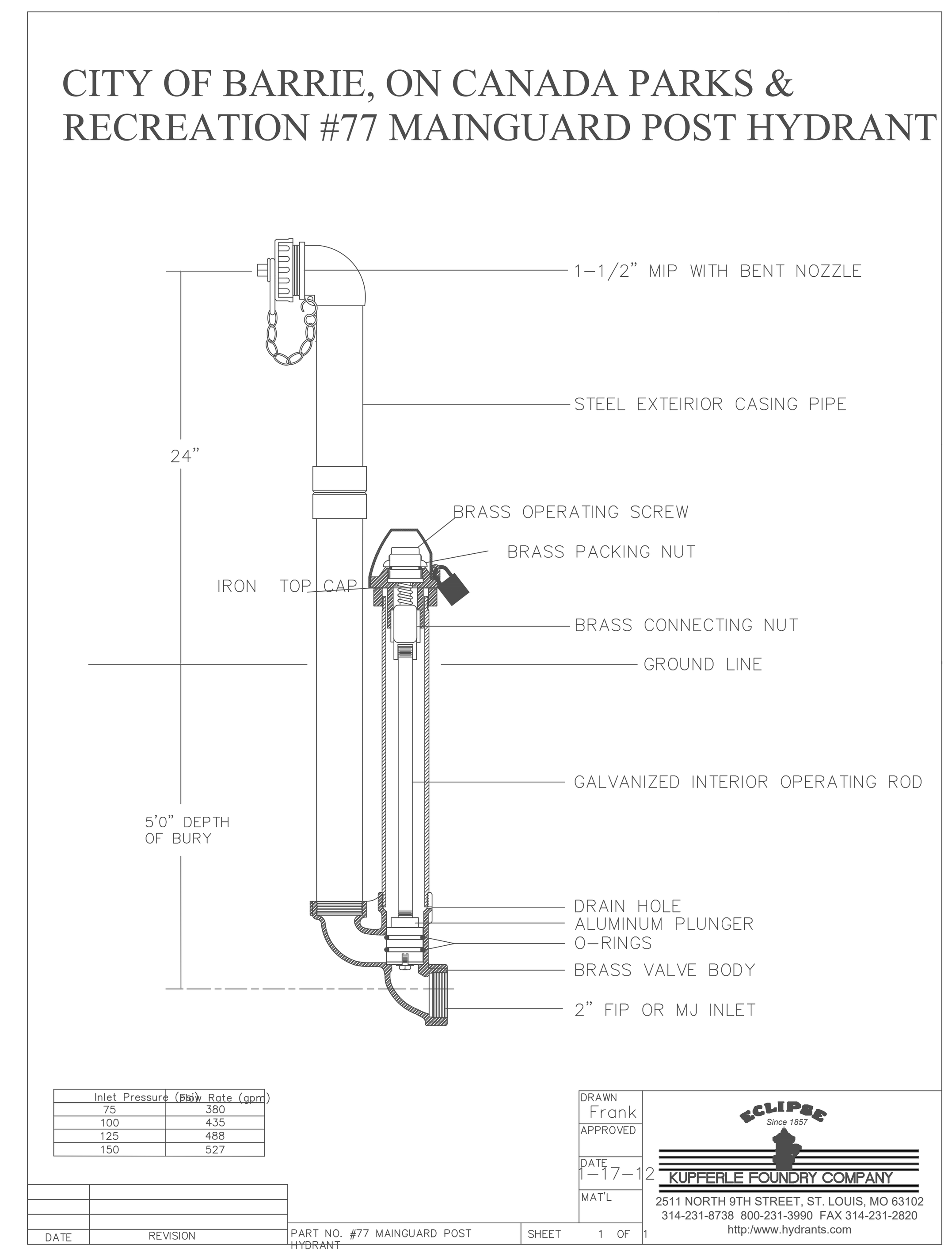








NOTE: CONCRETE TOE WALL TO BE INSTALLED ON MAPLE AVENUE



GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE

DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE

BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V0011968U502

237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	02/2021	J.B.
2.	TENDER READY	01/2024	J.B.
3.	LSRCA SUBMISSION	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK NEIGHBOURHOOD RENEWAL

SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

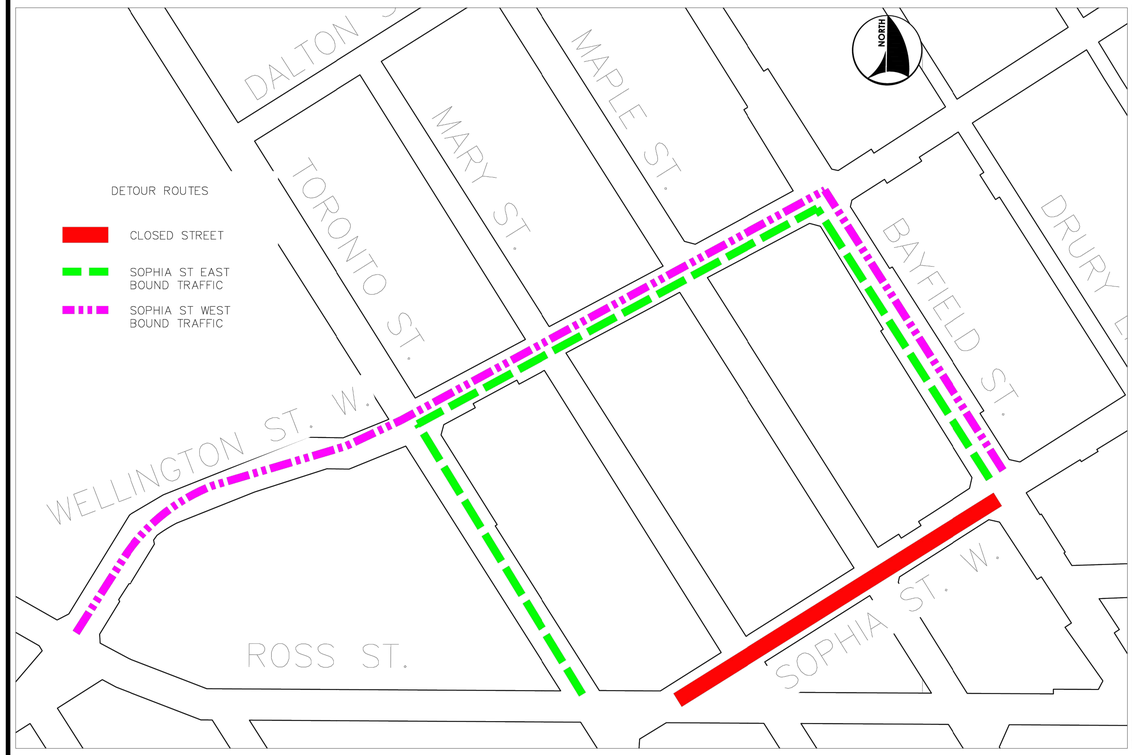
NOTES AND DETAILS

Barrie

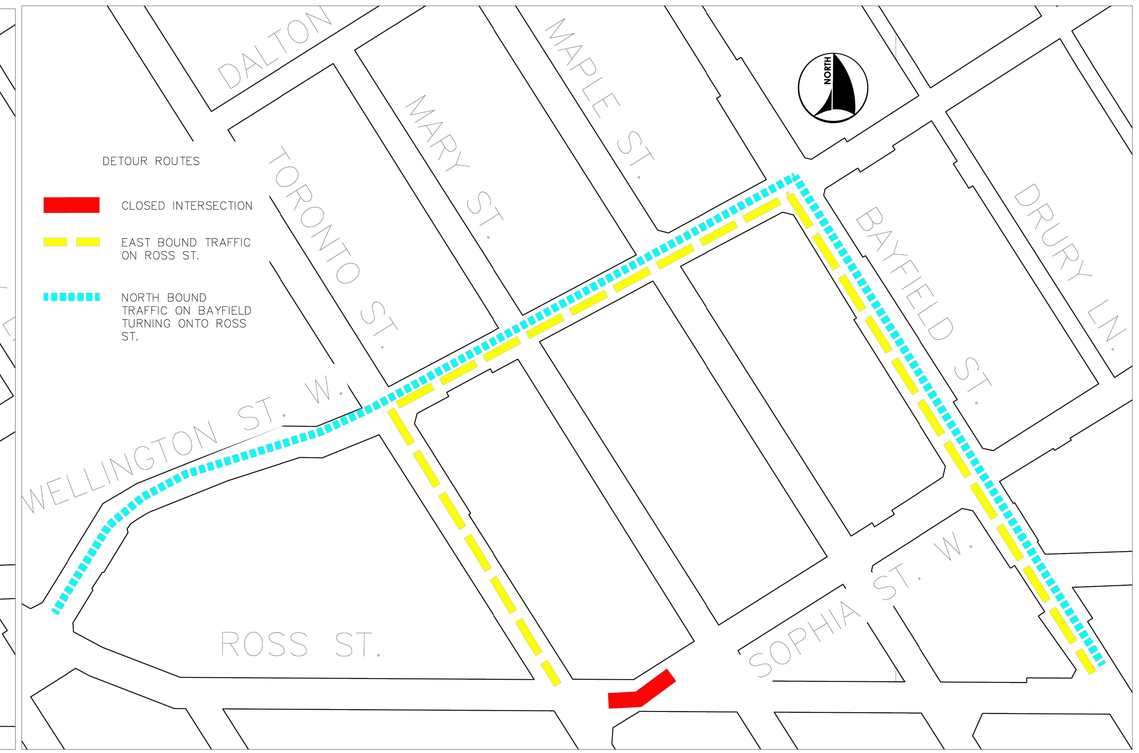
ENGINEERING DEPARTMENT

SCALE HOR.	AS NOTED	VERT.	AS NOTED	CONTRACT NO.	2024–108T
DESIGN	T.F.	DRAWN	T.F.	SHEET NO.	DET4
REVIEWED	J.B.	DATE	2024.05.16		

DETOUR PLANS



DT–1
SOPHIA ST. W. CLOSURE
N.T.S.



DT–2
SOPHIA–ROSS INTERSECTION CLOSURE
N.T.S.

GENERAL NOTES

REFER TO CURRENT CITY OF BARRIE STANDARDS FOR APPLICABLE GENERAL NOTES.

BENCH MARKS

DISTANCE NOTE
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996884

BEARING NOTE
BEARINGS HEREIN ARE GRID BEARINGS AND ARE DERIVED FROM CONTROL MONUMENTS 03120040046 (N=4916082.773, E=603662.430) AND 01019860463 (N=4916487.812, E=604671.597). AND ARE REFERRED TO THE CENTRAL MERIDIAN (81 DEGREES OF LONGITUDE) IN ZONE, 17 AND ARE BASED ON NAD83 (ORIGINAL). UTM COORDINATES

BENCH MARK V001196BU502
237.270 – COLLIER STREET UNITED CHURCH (FORMERLY WESLEYAN METHODIST CHURCH 1864), ON THE NORTH SIDE OF COLLIER STREET AND WEST OF POINTZ STREET, TABLET IN CENTRE OF FRONT OR SOUTH STONE FOUNDATION OF MOST WESTERLY COLUMN OF BELL TOWER, 150mm BELOW BRICK AND 330mm EAST OF COLUMN CORNER.

BENCH MARKS WILL BE FROM CITY OF BARRIE VERTICAL CONTROL NETWORK. INITIAL BENCH MARK TO BE OF 2nd ORDER ACCURACY

NO.	REVISIONS	DATE	APPROVED
1.	90% DESIGN	02/2021	J.B.
2.	TENDER READY	01/2024	J.B.
3.	LSRCA SUBMISSION	02/2024	J.B.
4.	ISSUED FOR TENDER	03/2024	J.B.
5.	ISSUED FOR CONSTRUCTION	05/2024	J.B.

LICENSED PROFESSIONAL ENGINEER
A. J. KILEY
100161950
May 16 2024
PROVINCE OF ONTARIO

QUEEN'S PARK
NEIGHBOURHOOD RENEWAL
SOPHIA STREET WEST, MARY STREET, AND MAPLE AVENUE

DETOUR PLANS

Barrie
ENGINEERING DEPARTMENT

SCALE HOR. AS NOTED	VERT. AS NOTED	CONTRACT NO.	2024–108T
DESIGN T.F.	DRAWN T.F.	SHEET NO.	DET5
REVIEWED J.B.	DATE 2024.05.16		

5/17/2024 10:23 AM JASMINE GROSSE DETAILS.DWG