

# HADDAD GEOTECHNICAL INC.

*Geotechnical & Environmental Engineers*

## Hydrogeological Assessment Proposed Development 805 Dundas Street East City of Mississauga, Ontario

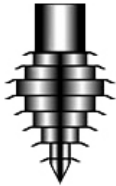


Prepared for:

KJC Properties Inc.  
1940 Ellesmere Road  
Scarborough, Ontario  
M1H 2V6

Project: 22-16145

November 2, 2022



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KJC Properties Inc.  
1940 Ellesmere Road  
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**Re: Hydrogeological Assessment  
Proposed Redevelopment  
805 Dundas Street East  
Mississauga, Ontario**

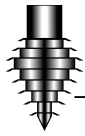
Dear Mr. Jabbaz:

Haddad Geotechnical Inc. was authorized by KJC Properties Inc., the owner of the subject property, to conduct a hydrogeological assessment for the proposed Redevelopment to be constructed on the subject property. Our findings and comments for the hydrogeological assessment are presented in the following report.

## **1. INTRODUCTION**

### **1.1 Project**

1. The site under consideration is located at 799, 801, 803 and 805 Dundas Street East (the Site), in the City of Mississauga, (see, Drawing Nos. 1 and 2). For the purpose of the present assessment, the Hydrogeological Assessment property is referenced as 805 Dundas Street East, Mississauga.
2. The proposed development concept plans for the project, prepared by Kirkor Architects and Planners, and presented in Appendix "A," indicate that the proposed redevelopment of the subject site consisting of:
  - the construction of a new, twelve (12) storey, multi-residential building (Building A), which will occupy the southern (nominal) portion of the site along Dundas Street.
  - the construction of three separate three-storey buildings (Building B, C and D) with a total of 20 conventional townhouses, which will occupy the northern (nominal) portion of the site.
  - the construction of hard and soft landscaping, a driveway, and access road network.
3. The proposed Building Section B presented in Appendix "A," also indicate that the Level 01-Upper and Level-01 Lower of the proposed building are to be set at Elevations 124.15±m and 123.45±m, respectively.
4. The proposed Building Section B, presented in Appendix "A," also indicate that all proposed buildings at the subject site, will be constructed over two (2) underground parking levels with the lowest level is to be set at 6.45±m below the proposed Level 01-Lower (i.e., elevation of the lowest basement: 117.0±m).



5. The existing buildings on the site are to be demolished.

## **1.2 Purpose**

1. The objectives of the subsurface investigation were to:
  - provide subsurface information with regards to the types, thicknesses and variability of the subsoils underlying the area of the proposed building.
  - establish groundwater conditions
  - provide estimate of volumes of water to be encountered for construction and permanent dewatering operations.
2. The present hydrogeological assessment is conducted by Haddad Geotechnical Inc., under the supervision of D. Graham Fisher, M.E.Sc., P.Eng., QP<sub>ESA</sub>. The present hydrogeological assessment of the subject site is conducted in general conformance with the following:
  - Ontario Water Resources Act
  - Ontario Regulation 387/04

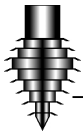
## **1.3 Site Description – Present**

1. The site under consideration is located on the northwest corner of Dundas Street East and Haines Road in the City of Mississauga.
2. The site has municipal address of 805 Dundas Street East, Mississauga, L4Y 2B7.
3. The subject property has an area of 12,707m<sup>2</sup>.
4. At the time of our investigation, 799, 801, 803 and 805 Dundas Street East are occupied by a Tim Hortons, a one-story commercial strip mall, a ShishaLicious Café, and Ultra Lighting respectively. A large asphalt parking lot was observed occupying the space between the individual commercial buildings.
5. The topography of the subject site was observed to slope down towards Dundas Street East from the northerly (nominal) area of the site.
6. The closest body of surface water to the subject property is Etobicoke Creek, located 1.6km east of the east limit of the subject property.

## **2. FIELD AND LABORATORY WORK**

### **2.1 Fieldwork**

1. The fieldwork, carried out on July 11<sup>th</sup> to 15<sup>th</sup>, July 27<sup>th</sup>, and August 8<sup>th</sup>, 2022, consisted of the following:
  - drilling of six (6) sampled boreholes, Borehole (BH) Nos. 1 to 3, 5, 7 and 8 to depths ranging from 6.3±m to 16.8±m below grade.
  - drilling of two (2) unsampled boreholes, Borehole (BH) Nos. 4 and 6 to depth of 5.8±m below grade.
  - coring of bedrock at BH No. 1, from 7.3±m to 14±m depths below existing grade.
  - installation of eight (8) monitoring wells. Monitoring Wells (MW) Nos. 1 to 8.
  - measurements of water levels in the monitoring wells.



2. Drawing No. 1 presents a site plan showing the approximate locations of the boreholes and monitoring wells. Drawing No. 2 presents a proposed site plan showing the approximate locations of the boreholes and monitoring wells.
3. Borehole Nos. 1 to 8 were advanced to 16.8±m, 12.2±m, 12.2±m, 5.8±m, 12.2±m, 5.8±m, 12.2±m, 6.1±m, respectively, below the existing grades on site using track mounted power drilling equipment with 200mm diameter, hollow-stem, continuous flight augers. Samples were obtained with a split spoon sampler, driven by a 140-lb hammer, falling 30" (760mm). Detailed descriptions of the subsoils encountered in the sampled Boreholes are presented on the borehole logs, Drawing Nos. 4 to 12.
4. The surface elevations at the Borehole locations are referenced to the existing catch basin located east of 803 Dundas Street East, having an elevation of 125.45±m, as per the site survey plan provided by client.

## **2.2 Subsurface Conditions**

### **2.2.1 Surficial Materials and Fill**

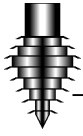
1. The surficial materials at Borehole Nos. 1, 2, 3 and 7 were observed to consist of 100±mm of asphalt, underlain by 100±mm of granular materials. The surficial materials at Borehole No. 5 were observed to consist of 100±mm of grass and topsoil. The surficial materials at Borehole No. 8 were observed to consist of 100±mm of concrete slab.
2. Fill materials consisting of loose to compact sand and/or or sandy silt with trace gravels and trace silt and occasional crushed stone/rock, in moist condition and brown in colour, were observed below the surficial materials at borehole locations 1, 2, 3, 5, 7 and 8 and extended to depths of 2.3±m, 1.5±m, 1.5±m, 1.5±m, 1.5±m and 1.5±m below the existing grades, respectively.

### **2.2.2 Natural Subsoils**

1. Natural, medium dense to very dense, sand subsoils with trace to some gravels and trace silt were observed to underlie the fill materials at borehole locations 2, 3, 5, 7 and 8 and extended to 7.3±m, 7.6±m, 6.1±m, 2.3±m, and 6.1±m below existing grades, respectively. The results of Standard Penetration Tests (SPT) in the sand subsoils indicated penetration resistance of 27 blows per 300mm to over 50 blows per 100mm.
2. Natural, medium dense to very dense, silty sand or silty sand till subsoils with trace gravels and trace clay were observed to underlie the fill materials at borehole location 1 and upper natural subsoils at borehole locations 3, 5 and 7 and extended to 7.3±m, 7.8±m, 6.3±m, and 5.2±m below existing grades, respectively. The results of Standard Penetration Tests (SPT) in the silty sand or silty sand till subsoils indicated penetration resistance of 18 blows per 300mm to over 50 blows per 50mm.

### **2.2.3 Bedrock**

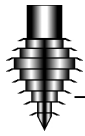
1. The surface of weathered bedrock was encountered at depths of 7.3±m, 7.3±m, 7.6±m, 6.3±m, 5.2±m and 6.1±m depths below existing grades at Borehole Nos. 1, 2, 3, 5, 7 and 8 respectively (elevations ranging from 117.3±m to 120.6±m).



2. Bedrock was observed to underlie the upper natural subsoils at Borehole Nos. 1, 2, 3, 5 and 7 and extended to depths of 16.8±m, 12.2±m, 12.2±m, 12.2±m and 12.2±m below the grades. The drilling auger was refused to further penetration by the bedrocks at depth of 6.3±m within the explored depth at BH No. 8.
3. Coring of bedrock was conducted at BH No. 1, from a depth of 7.3±m to 14±m below existing grade. The coring was conducted in incremental runs of 1.5±m (5 ft). After each coring run the percent core recovery, and the Rock Quality Designation (R.Q.D.) were recorded.
4. The bedrock at each of the cored locations was observed to consist primarily of grey shale (Georgian Bay formation, Dundas unit), with occasional limestone bands up to 100mm thickness.
5. The upper 0.6±m to 1.8±m of the shale bedrock was easily penetrated by the augur equipment used, indicating very weathered to weathered condition. The upper portions of the bedrock indicated recoveries of R.Q.D. of less than 50%, indicating very poor to poor rock quality. Below a depth of 9.6±m, at Borehole No. 1 (elevations 115±m) recoveries of 95% to 100%, and R.Q.D. of greater than 50% were consistently encountered, indicating fair to good condition of the bedrock.

### **2.3 Groundwater**

1. Monitoring Well Nos. 1 to 8, were installed in Borehole Nos. 1 to 8, as shown on the provided Site Plan, Drawing No. 1.
2. Monitoring Well Nos. MW1 to 8 were installed in Borehole Nos. 1 to 8, respectively. Table No. 1 below presents details of the monitoring well installations.
3. Measurements of water levels in the monitoring wells were conducted on a bi-weekly basis during periods July 19 to August 8, 2022. Table No. 2, below, presents a summary of measurements of the elevations of groundwater at each of the Monitoring Well locations.



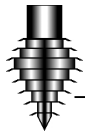
**Table No. 1**  
**Summary of Well Construction Details**

Well No.	MW1	MW2	MW3	MW4	MW5
Installation Date	14-July-2022	13-July-2022	13-July-2022	12-July-2022	12-July-2022
Pipe diameter, mm	50	50	50	50	50
Grade Elevation (masl)	124.60	126.00	125.60	125.60	124.40
Screened Interval (m)	13.8 – 16.8	9.2 – 12.2	9.2 – 12.2	2.7 – 5.8	9.2 – 12.2
Screen Length (m)	3.0	3.0	3.0	3.0	3.0
Riser Length (m)	3.0	3.0	3.0	3.0	3.0
Sand Backfill (m)	13.5 – 16.8	8.9 – 12.2	8.9 – 12.2	2.4 – 5.8	8.9 – 12.2
Bentonite Backfill (m)	0.0 – 13.5	0.0 – 8.9	0.0 – 8.9	0.0 – 2.4	0.0 – 8.9

Well No.	MW6	MW7	MW8
Installation Date	11-July-2022	11-July-2022	15-July-2022
Pipe diameter, mm	50	50	50
Grade Elevation (masl)	124.40	125.80	126.40
Screened Interval (m)	2.7 – 5.8	9.2 – 12.2	3.0 – 6.1
Screen Length (m)	3.0	3.0	3.0
Riser Length (m)	3.0	3.0	3.0
Sand Backfill (m)	2.4 – 5.8	8.9 – 12.2	2.7 – 6.0
Bentonite Backfill (m)	0.0 – 2.4	0.0 – 8.9	0.0 – 2.7

4. The observed water levels vary from a low of 117.99 masl at MW5 on August 8, 2022, to a high level of 123.56 masl at MW8 on June 22, 2022. The maximum variance of high groundwater levels above average levels was measured at 1.12m at MW1.
5. The measured water levels indicate a groundwater flow direction from north to south and slightly east to west across the area of the site. The overall average of the average levels measured in the monitoring wells is at elevation 120.44 masl, and average of high-water levels is at elevation 120.75 masl, a variance of 0.31m from average to high water level.
6. The water level measurements indicate that the key aquifer consist of wet sand seams within the natural silty sand till soils below the property.

**Table No. 2**

**Groundwater Level Measurements at Monitoring Wells**

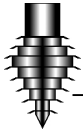
Monitoring Well (MW) – Borehole (BH) No.	MW1	MW2	MW3	MW4	MW5
Existing Grade Elevation at Borehole/Well Locations (masl)	124.60	126.00	125.60	125.60	124.40
Date of Installation	30-May-2022	30-May-2022	30-May-2022	30-May-2022	30-May-2022
July 19, 2022 Depth (m) Elevation (masl)	3.83 120.77	5.20 120.80	5.80 119.80	4.80 120.80	5.79 118.61
July 27, 2022 Depth (m) Elevation (masl)	4.91 119.69	5.18 120.84	5.84 119.76	5.79 119.81	6.36 118.04
August 8, 2022 Depth (m) Elevation (masl)	4.95 119.65	5.22 120.78	5.86 119.74	5.75 119.85	6.41 117.99
Highest Water Elevation (masl)	120.77	120.84	119.80	120.80	118.61
Lowest Water Elevation (masl)	119.65	120.78	119.74	119.81	117.99
Variance High to Average (m)	1.12	0.06	0.06	0.99	0.62

Monitoring Well (MW) – Borehole (BH) No.	MW6	MW7	MW8
Existing Grade Elevation at Borehole/Well Locations (masl)	124.40	125.80	126.40
Date of Installation	11-July-2022	11-July-2022	15-July-2022
July 19, 2022 Depth (m) Elevation (masl)	Dry <118.60	4.92 120.88	2.84 123.56
July 27, 2022 Depth (m) Elevation (masl)	Dry <118.60	5.33 120.47	2.84 123.56
August 8, 2022 Depth (m) Elevation (masl)	Dry <118.60	5.42 120.38	2.89 123.51
Highest Water Elevation (masl)	<118.60	120.88	123.56
Lowest Water Elevation (masl)	<118.60	120.38	123.51
Variance High to Average (m)	<118.60	0.50	0.05

**2.4 Slug Test**

1. The hydraulic conductivity was also determined based on a single well response test (slug test) conducted at MW3. This test involved the rapid removal of water from a single well and monitoring well recovery. The result of the falling head test was analyzed using the Bouwer and Rice (1976) method.
2. The results of the slug tests are presented on Appendix “B” and indicated a hydraulic conductivity of the silt and sand till stratum of  $2.81 \times 10^{-6}$  m/s in MW3. According to Freeze and Cherry (1979), the typical hydraulic conductivity of the strata investigated at the site are sand till with a range of  $10^{-6}$  m/s to  $10^{-4}$  m/s. Based on the analysis, the hydraulic conductivity field results are relative consistent with the published values of associated with geological materials which were tested.
3. The water levels in well MW3 were measured at 5.86m depth (elevation 119.74 masl) before and after the slug test
4. Measurement of conductivity of soils on the site by means of pump test or measurement of groundwater levels using digital equipment were not conducted.

**2.5 Laboratory Work**



1. The laboratory analysis of borehole samples carried out included the determination of moisture contents, with results as presented on the Borehole Logs.
2. The results of moisture content are presented on the Borehole Logs and the results of gradation analyses carried out on five (5) representative samples of the native subsoils encountered in Borehole Nos. 1, 2, 3, 5, and 7, are presented on Drawing No. 13.
3. The results of the gradation analyses carried out on the upper natural subsoils sample obtained from Borehole No. 1 indicated 4% gravels, 69% sand, 24% silt, and 3% clay.
4. The results of the gradation analyses carried out on the upper natural subsoils sample obtained from Borehole No. 2 indicated 2% gravels, 93% sand, and 5% silt.
5. The results of the gradation analyses carried out on the upper natural subsoils sample obtained from Borehole No. 3 indicated 13% gravel, 84% sand, and 3% silt.
6. The results of the gradation analyses carried out on the upper natural subsoils sample obtained from Borehole No. 5 indicated 12% gravel, 82% sand, and 6% silt.
7. The results of the gradation analyses carried out on the lower natural subsoils sample obtained from Borehole No. 7 indicated 14% gravel, 49% sand, 29% silt, and 8% clay.

### **3. DISCUSSION & RECOMMENDATIONS**

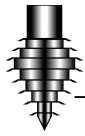
#### **3.1 Design Parameters**

1. The proposed development concept plans for the project, prepared by Kirkor Architects and Planners, and presented in Appendix "A," indicate that the proposed redevelopment of the subject site will consist of:
  - the construction of a new, twelve (12) storey, multi-residential building (Building A), which will occupy the southern (nominal) portion of the site along Dundas Street.
  - the construction of three separate three-storey buildings (Building B, C and D) with a total of 20 conventional townhouses, which will occupy the northern (nominal) portion of the site.
  - the construction of hard and soft landscaping, a driveway, and access road network.
2. The proposed Building Section B presented in Appendix "A," also indicate that the Level 01-Upper and Level-01 Lower of the proposed building are to be set at Elevations 124.15±m and 123.45±m, respectively.
3. The proposed Building Section B, presented in Appendix "A," also indicate that all proposed buildings at the subject site, will be constructed over two (2) underground parking levels with the lowest level is to be set at 6.45±m below the proposed Level 01-Lower (i.e., elevation of the lowest basement: 117.0±m)

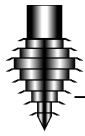
#### **3.2 Estimation of Groundwater Pumping Flow Rates**

1. The boreholes conducted in our subsurface investigation on the site, as described above, indicated the presence of upper fill materials, underlain below elevation 124.9 masl to 122.1 masl by natural, sand soils.





2. The observed water levels vary from a low of 117.99 masl at MW5 on August 8, 2022, to a high level of 123.56 masl at MW8 on June 22, 2022. The measured water levels indicate a groundwater flow direction from north to south and slightly east to west across the area of the site. The overall average of the average levels measured in the monitoring wells is at elevation 120.44 masl, and average of high-water levels is at elevation 120.75 masl, a variance of 0.31m from average to high water level. For the purpose of this report, the average of highest water levels measured at each monitoring well location to date was used for the calculations.
3. The hydraulic conductivity of the sand stratum is hydraulic conductivity of the silt and sand till stratum of  $2.81 \times 10^{-6}$  m/s in MW3 based on the slug test in section 2.4.
4. For the purpose of this report, it is assumed that the groundwater is to be drawn down to 0.3m below the underside of base of footing (elevation 115.20 masl) during the construction phase, and to 0.3m below the underground floor slab (elevation 116.7 masl) in the post-construction period.
5. The potential dewatering needs for the required excavation are estimated using methodology outlined in *Construction Dewatering and Groundwater Control, New Methods and Applications, Third Edition*; J. Patrick Powers et al, 2007. Dewatering needs are estimated for three scenarios as follows: average conditions as measured (average construction flow), potential short-term high-water table conditions (peak construction flow) and long-term maintenance flows.
6. The dewatering requirements are estimated using the formula for radial flow into a well (Powers, equation 6.3) of equivalent radius of a circular system with the same perimeter. The formula requires estimates for the following:
  - a = excavation length, m
  - b = excavation width, m
  - K = hydraulic conductivity, m/min
  - H = initial saturated aquifer thickness, m
  - h = saturated aquifer thickness after desired drawdown is achieved, m
  - R = radius of influence
  - r = well radius
7. For the purposes of the construction dewatering assessment the excavation is assumed to extend to the interior face of temporary shoring along the perimeter of the site. For the long-term dewatering needs, the footprint area of the underground levels is used. The average lengths, a = 110.0m, and average width, b = 90.0m, of the proposed excavation were determined above.
8. An average lowest floor elevation of 117.00 masl and average elevation for underside of footing of 115.5 masl are assumed.
9. It is assumed that the excavation will occur within an unconfined aquifer, assumed to be homogeneous and extend in all directions. The hydraulic conductivity of the aquifer is estimated to be  $2.81 \times 10^{-4}$  cm/s =  $2.81 \times 10^{-6}$  m/s.
10. The presence of wet seams within the sand soils presented an aquifer. For the purpose of our calculations, the base of aquifer is assumed to be at 0.5m below the assumed footing level, elevation 115.00 masl, during construction and 0.5m below the lower floor level, elevation 116.50masl, in the post-construction period.



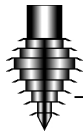
11. In the absence of a full year of groundwater level measurements, it is assumed for the purpose of this report, that a seasonally high groundwater level would be at 0.5m above observed levels.
12. The formula to calculate inflow is as follows (Powers, Table 6.1 – Metric Units):

$$Q = \frac{K (H^2 - h^2)}{5.31 \times 10^{-6} \ln(R/r)}$$

where:

- H = aquifer saturated thickness, m
- h = saturated thickness at excavation after dewatering, m
- R = effective radius of influence, m, =  $R_0 + r$
- r = equivalent well radius, m, =  $(a + b) / \pi$
- $R_0$  = radius of influence of the excavation
- $R_0 = 3000 (H - h) \sqrt{K}$  where  $R_0, H, h$  in ft, K in m/s

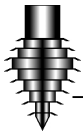
13. On the above basis, the estimated flows of water during construction period and in the long term are presented in Table No. 4, below.



**Table No. 4  
Estimated Flows During Construction and Long-Term Periods**

Factors/Result	Average Construction Drawdown	Peak Construction Drawdown	Average Long term Drawdown	Peak Long term Drawdown
K (m/sec)	2.81E-06	2.81E-06	2.81E-06	2.81E-06
a Ex. Length (m)	111.2	111.2	110	110
b Ex. Width (m)	91.2	91.2	90	90
Floor Elevation masl	117	117	117	117
Underside of Footing Elevation, masl	115.5	115.5	115.5	115.5
Water Table El. (m)	120.75	121.25	120.75	121.25
Base of Aquifer El. (m)	115	115	116.5	116.5
H Init Aq. Thickness (m)	5.75	6.25	4.25	4.75
Drawdown El (masl)	115.2	115.2	116.7	116.7
h Drawdown Aq. Thickness (m)	0.2	0.2	0.2	0.2
R <sub>0</sub> Radius of Influence (m)	27.9	30.4	20.4	22.9
r Equivalent Well Radius (m)	64.4	64.4	63.7	63.7
R effective radius of influence (m)	92.3	94.9	84.0	86.5
Q (m <sup>3</sup> /sec)	8.10E-04	8.91E-04	5.73E-04	6.48E-04
Q (L/min)	48.60	53.44	34.39	38.85
Q (L/day)	69,980	76,950	49,523	55,945
Factor of Safety	1.5	1.5	1.5	1.5
Q - Conservative (L/min)	72.90	80.16	51.59	58.28
Q - Conservative (L/day)	104,969	115,425	74,284	83,918

14. A discharge flow rate for groundwater of 48.60 L/min (69,980 L/day) is estimated during the construction period. A discharge flow rate of 34.39 L/min (49,523 L/day) is estimated during the long-term (post-construction) period.
15. With assumption of peak water levels at 0.5m higher than observed highest water levels, peak flow rates of groundwater of 53.44 L/min (76,950 L/day) and 38.85 L/min (55,945 L/day) are estimated for the during-construction and post-construction periods, respectively.
16. For design purposes, it is recommended that a factor of safety of 1.5 be applied to the above noted discharge flow rates. This results in a total design discharge flow rates of groundwater of 72.90 L/min (104,969 L/day) during the construction period, and 51.59 L/min (74,284 L/day) during the long-term (post-construction) period.
17. For design purposes, it is recommended that a factor of safety of 1.5 be applied to the above noted peak discharge flow rates, which were determined with assumption of peak water levels at 0.5m higher than observed highest water levels. This results in total design discharge flow rates of groundwater of 80.16 L/min (115,425 L/day) and 58.28 L/min (83,918 L/day) during construction period, and during the long-term (post construction) period, in peak conditions, respectively.



18. The above-noted flow rates during the construction periods have not included an allowance for discharge of surface water which may accumulate in the excavations during the construction period. For purpose of estimating surface water discharge, it is assumed that a 2-year design storm (rainfall of 52.1mm over 2 hours) on the excavation area of 10,141m<sup>2</sup>, would result in an accumulation of 528.0m<sup>3</sup> (528000 litres) of water in the excavation. It is also assumed that this accumulated surface water will be pumped out over a period of 2 days, resulting in an average discharge rate of surface water of 264000 L/day (11000L/hour, 183L/min).
19. The calculations of flow rates of discharge of groundwater from the site, during construction and post-construction conditions, indicate flow rates of more than 50000 litres per day. On this basis a permit to take water (PTTW) from the Ministry of the Environment, Conservation and Parks (MECP) will be required during the construction period. Alternatively, the owner has the option to remove water from site by truck haulage during construction period.

#### **4. REPORT LIMITATIONS**

1. The information provided and recommendations made in this report, in terms of the thicknesses, depth and type of subsoils encountered, groundwater levels, etc., are only applicable to the actual locations explored. Subsurface and groundwater conditions between and beyond the borehole locations may differ from those encountered at the borehole locations, and such conditions may become apparent during construction, which could not be detected or anticipated at the time of writing of this report. Should additional information become apparent upon excavation or construction, or further investigation, our office should be contacted so that the situation may be reassessed, and alternate recommendations made, if deemed necessary. It is recommended practice that the Geotechnical Engineer be retained during the construction to confirm that the subsurface conditions across the site do not deviate materially from those encountered in the boreholes.
2. The design recommendations given in this report are applicable only to the project described in the text, and then only if constructed substantially in accordance with the details stated in this report. Should plans for the project change, most notably if much lower underground levels approaching the observed groundwater levels are anticipated, it will be necessary for Haddad Geotechnical Inc. to re-evaluate the findings of this investigation in light of the revised plans.
3. The comments made in this report relating to potential construction problems and possible methods of construction are intended only for the guidance of the designer. The contractors bidding on this project or undertaking the construction should, therefore, make their own interpretation of the factual information presented and draw their own conclusions as to how the subsurface conditions may affect their work. The report has been prepared in accordance with normally accepted geotechnical engineering practices. No other warranty is expressed or implied.
4. The information provided and recommendations presented in this report reflect the best judgment of Haddad Geotechnical Inc. in light of the information available to it at the time of preparation. Any use which a third party makes of this report or any reliance on or decisions to be based on it are the responsibility of that third party. Haddad Geotechnical Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.



We trust that the information presented in this report satisfies your present requirements. Should you require further information, please contact our office.

Yours very truly,  
**HADDAD GEOTECHNICAL INC.**

Rico Van, Geotechnical Engineering Technologist

D. Graham Fisher, M.E.Sc., P. Eng.

Encs.

Dist:

KJC Properties Inc - 1 pdf

File:2216145.hydrog.rev2.Nov 2 2022



RESIDENTIAL USE

RESIDENTIAL USE

COMMERCIAL USE

COMMUNITY USE

RESIDENTIAL USE

COMMUNITY USE

COMMERCIAL USE

COMMERCIAL USE

COMMERCIAL USE

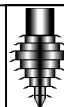
COMMERCIAL USE



APPROXIMATE LOCATION OF BOREHOLES



APPROXIMATE LOCATION OF MONITORING WELLS



**HADDAD GEOTECHNICAL INC.**

151 Amber Street, Unit 17  
Markham, Ontario, Canada, L3R 3B3

905-475-0951, fax: 905-475-8338  
info@haddadgeo.com

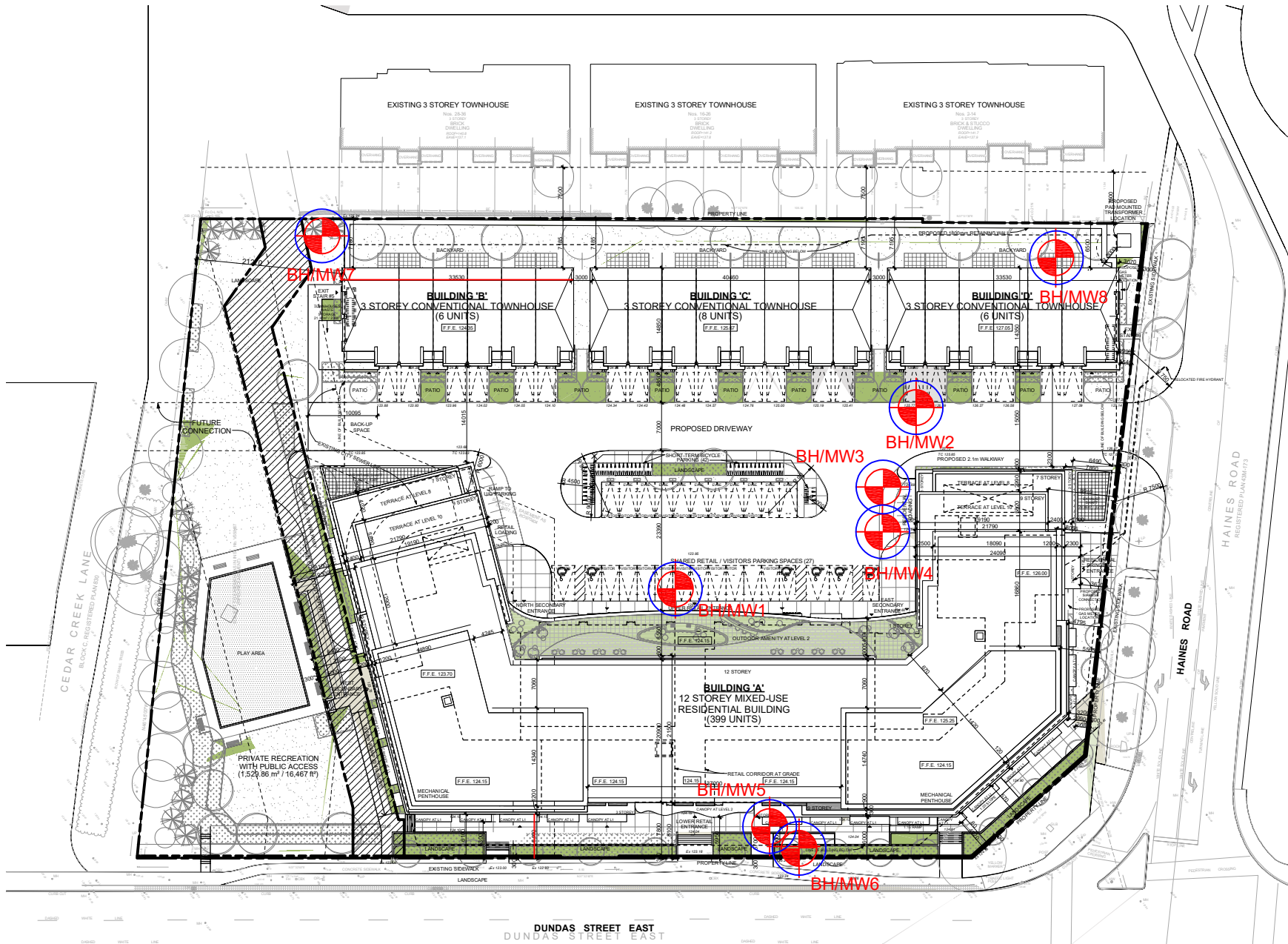
**799,801,803 & 805 DUNDAS STREET EAST,  
MISSISSAUGA**

**SITE PLAN SHOWING APPROXIMATE LOCATIONS  
OF BOREHOLES & MONITORING WELLS**

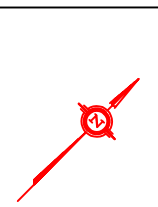
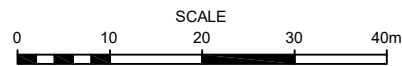
SCALE AS NOTED  
DRAWN BY: GF


PROJECT:22-16145  
DRAWING No. 1  
DATE: JULY 25, 2022

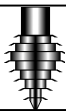




-  APPROXIMATE LOCATION OF BOREHOLES
-  APPROXIMATE LOCATION OF MONITORING WELLS



 <b>HADDAD GEOTECHNICAL INC.</b> 151 Amber Street, Unit 17 Markham, Ontario, Canada, L3R 3B3 905-475-0951, fax: 905-475-8338 info@haddadgeo.com	
<b>799,801,803 &amp; 805 DUNDAS STREET EAST, MISSISSAUGA</b>	
<b>PROPOSED SITE PLAN SHOWING APPROXIMATE LOCATION OF BOREHOLES AND SLOPE SECTIONS</b>	
SCALE: AS INDICATED PREPARED BY: DK	PROJECT: 22-16145 DRAWING No. 2 DATE: NOVEMBER 2, 2022



# HADDAD GEOTECHNICAL INC.

Engineering Data Sheet For Borehole No. 1 and Monitoring Well No. 1

Project No. 22-16145  
Drawing No. 3

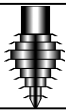
Project: Proposed Residential Development		Field Supervisor: HR
Location: 799-805 Dundas Street East, Mississauga		
Hole Location: see Drawing No. 1		
Hole Elevation & Datum: 124.6±m, see Note 1		
Start Date: July 14, 2022	End Date: July 14, 2022	

LEGEND		
51 mm dia Split Spoon Sample		Water Level
Auger Sample		
N - Standard Penetration Value		Pocket Penetrometer
Gradation Analysis Completed	M	
No Split Spoon Recovery	NR	

Description	Elev. ±m	Depth ±m	Strength and Penetration Resistance (KPa)					Sample No.	N	Moisture Content %	
			N Blows/300mm								
GROUND SURFACE OF BOREHOLE NO. 1	124.6	0.0	0	20	40	60	80	100			
ASPHALT - 100±mm GRANULAR MATERIALS - 100±mm FILL MATERIALS - loose to compact sand, trace gravels, trace silt, brown, moist		1.0	0	20	40	60	80	100	SS0	31	6.0
		2.0	0	20	40	60	80	100	SS1	8	13.7
		3.0	0	20	40	60	80	100	SS2	14	9.7
SILTY SAND - trace gravels, trace clay, medium dense, layering, brown, moist	122.3	3.5	0	20	40	60	80	100	M SS3	18	8.2
bentonite backfill; 0.0m - 13.5m		4.0	0	20	40	60	80	100	SS4	23	12.6
	120.8 (July 19, 2022)	4.5	0	20	40	60	80	100			
	120.1 (July 27, 2022) (Aug 08, 2022)	5.0	0	20	40	60	80	100	SS5	50 3"	7.9
SILTY SAND TILL - trace gravels, trace clay, very dense, occ. crushed rock at tip of spilt spoon, brown, moist		6.0	0	20	40	60	80	100	SS6	50 2"	2.0
		7.0	0	20	40	60	80	100			
WEATHERED SHALE - very dense, grey, moist	117.3	8.0	0	20	40	60	80	100			
		8.5	0	20	40	60	80	100			
		9.0	0	20	40	60	80	100			
		10.0	0	20	40	60	80	100			
		11.0	0	20	40	60	80	100			
		12.0	0	20	40	60	80	100			
		13.0	0	20	40	60	80	100			
	110.9	13.7	0	20	40	60	80	100			

CONTINUED ON DRAWING NO. 4





# HADDAD GEOTECHNICAL INC.

Engineering Data Sheet For Borehole No. 1 and Monitoring Well No. 1

Project No. 22-16145  
Drawing No. 4

Project: Proposed Residential Development  
 Location: 799-805 Dundas Street East, Mississauga  
 Hole Location: see Drawing No. 1  
 Hole Elevation & Datum: XXX.XX±m, see Note 1  
 Start Date: July 14, 2022    End Date: July 14, 2022  
 Field Supervision: HR

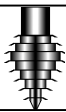
**LEGEND**  
 51 mm dia Split Spoon Sample Water Level   
 Auger Sample   
 N - Standard Penetration Value Pocket Penetrometer   
 Gradation Analysis Completed M  
 No Split Spoon Recovery NR

Description	Elev. ±m	Depth ±m	Strength and Penetration Resistance (KPa)					Sample No.	N	Moisture Content %
			0	50	100	150	200			
CONTINUED FROM DRAWING NO. 3			N Blows/300mm							
	110.9	13.7	0	20	40	60	80	100		
WEATHERED SHALE - very dense, grey, moist		14.0								
		15.0								
sand backfill: 13.5m - 16.8m		16.0								
screening interval: 13.8m - 16.8m		16.8								
END OF BOREHOLE	107.8	17.0								
		18.0								
		19.0								
		20.0								
		21.0								
		22.0								
		23.0								
		24.0								
		25.0								
		26.0								
		27.0								

- NOTES:**
- Elevation datum, referenced to the existing catch basin, El. 125.45±m, located east of 803 Dundas Street East, as per the site survey plan provided by client.
  - Monitoring well MW1 installed on July 14, 2022 with flush mount covering.
    - 0 - 13.8m riser
    - 13.8 - 16.8m screen
    - 0.0 - 13.5m bentonite backfill
    - 13.5 - 16.8m sand backfill
  - Water levels (depth (elevation), m)
 

July 19, 2022	3.83	(120.8)
July 27, 2022	4.91	(119.7)
August 08, 2022	4.95	(119.7)





# HADDAD GEOTECHNICAL INC.

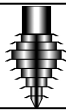
Engineering Data Sheet For Borehole No. 3 and Monitoring Well No. 3

Project No. 22-16145  
Drawing No. 6

Project: Proposed Residential Development		Field Supervision: HR
Location: 799-805 Dundas Street East, Mississauga		
Hole Location: see Drawing No. 1		
Hole Elevation & Datum: 125.6±m, see Note 1		
Start Date: July 13, 2022	End Date: July 13, 2022	

LEGEND		
51 mm dia Split Spoon Sample		Water Level
Auger Sample		
N - Standard Penetration Value		Pocket Penetrometer
Gradation Analysis Completed	M	
No Split Spoon Recovery	NR	

Description	Elev. ±m	Depth ±m	Strength and Penetration Resistance (KPa)					Sample No.	N	Moisture Content %		
			N Blows/300mm									
GROUND SURFACE OF BOREHOLE NO. 3	125.6	0.0	0	20	40	60	80	100				
ASPHALT - 100±mm GRANULAR MATERIALS - 100±mm FILL MATERIALS - compact sand, trace gravels, trace silt, brown, moist		0.0 - 1.0			○					SS0	26	5.7
		1.0 - 2.0			○					SS1	42	5.9
	124.1	2.0 - 3.0			○					SS2	44	5.5
		3.0 - 4.0				○				SS3	52	6.4
		4.0 - 5.0				○				SS4	44	5.5
		5.0 - 6.0					○			M SS5	44	6.0
		6.0 - 7.0						○		SS6	75	15.9
	118.0	7.0 - 8.0							+	SS7	50 3"	9.6
WEATHERED SHALE - very dense, grey, moist	117.8	8.0 - 9.0										
bentonite backfill: 0.0m - 8.9m sand backfill: 8.9m - 12.2m		9.0 - 10.0										
NOTES: 1. Elevation datum, referenced to the existing catch basin, El. 125.45±m, located east of 803 Dundas Street East, as per the site survey plan provided by client. 2. Monitoring well MW3 installed on July 13, 2022 with flush mount covering. 0 - 9.2m riser 9.2 - 12.2m screen 0.0 - 8.9m bentonite backfill 8.9 - 12.2m sand backfill 3. Water levels (depth (elevation), m) July 19, 2022      5.80 (119.8) July 27, 2022      5.84 (119.8) August 08, 2022    5.86 (119.7)		10.0 - 11.0										
		11.0 - 12.0										
END OF BOREHOLE	113.4	12.0 - 13.0										
		13.0 - 13.7										



# HADDAD GEOTECHNICAL INC.

Engineering Data Sheet For Borehole No. 4 and Monitoring Well No. 4

Project No. 22-16145  
Drawing No. 7

Project: Proposed Residential Development		Field Supervisor: HR
Location: 799-805 Dundas Street East, Mississauga		
Hole Location: see Drawing No. 1		
Hole Elevation & Datum: 125.6±m, see Note 1		
Start Date: July 12, 2022	End Date: July 12, 2022	

LEGEND	
51 mm dia Split Spoon Sample	Water Level
Auger Sample	
N - Standard Penetration Value	Pocket Penetrometer
Gradation Analysis Completed	M
No Split Spoon Recovery	NR

Description	Elev. ±m	Depth ±m	Strength and Penetration Resistance (KPa)					Sample No.	N	Moisture Content %
			0	50	100	150	200			
GROUND SURFACE OF BOREHOLE NO. 4	125.6	0.0	N Blows/300mm							
UNSAMPLED BOREHOLE		0.0	0	20	40	60	80	100		
bentonite backfill: 0.0m - 2.4m		0.0 - 2.4								
sand backfill: 2.4m - 5.8m		2.4 - 5.8								
screening interval: 2.7m - 5.8m		2.7 - 5.8								
		3.0								
		4.0								
		5.0								
		5.79								
		5.80								
		6.0								
		7.0								
		8.0								
		9.0								
		10.0								
		11.0								
		12.0								
		13.0								
		13.7								

END OF BOREHOLE  
AUGER REFUSAL

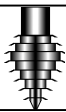
NOTES:

- Elevation datum, referenced to the existing catch basin, El. 125.45±m, located east of 803 Dundas Street East, as per the site survey plan provided by client.
- Monitoring well MW4 installed on July 12, 2022 with flush mount covering.
  - 0 - 2.7m riser
  - 2.7 - 5.8m screen
  - 0.0 - 2.4m bentonite backfill
  - 2.4 - 5.8m sand backfill
- Water levels (depth (elevation), m)
 

July 19, 2022	4.80	(120.8)
July 27, 2022	5.79	(119.8)
August 08, 2022	5.75	(119.9)







# HADDAD GEOTECHNICAL INC.

Engineering Data Sheet For Borehole No. 7 and Monitoring Well No. 7

Project No. 22-16145  
Drawing No. 10

Project: Proposed Residential Development		Field Supervision: HR
Location: 799-805 Dundas Street East, Mississauga		
Hole Location: see Drawing No. 1		
Hole Elevation & Datum: 125.8±m, see Note 1		
Start Date: July 11, 2022	End Date: July 11, 2022	

LEGEND		
51 mm dia Split Spoon Sample		Water Level
Auger Sample		
N - Standard Penetration Value		Pocket Penetrometer
Gradation Analysis Completed	M	
No Split Spoon Recovery	NR	

Description	Elev. ±m	Depth ±m	Strength and Penetration Resistance (KPa)					Sample No.	N	Moisture Content %		
			N Blows/300mm									
GROUND SURFACE OF BOREHOLE NO. 7	125.8	0.0	0	20	40	60	80	100				
ASPHALT - 100±mm												
GRANULAR MATERIALS - 250±mm												
FILL MATERIALS - compact sandy silt, trace gravels, brown, slight green colouring, moist		1.0							SS0	18	9.7	
									SS1	15	10.6	
SAND - some gravels, trace silt, dense, layering, brown, slight green colouring, moist	124.3	2.0							SS2	34	7.7	
									SS3	33	12.2	
SILTY SAND TILL - some gravels, trace clay, medium dense to dense, slight green colouring, moist	123.5	3.0							M	SS4	21	15.3
		4.0										
		5.0							SS5	44	8.8	
WEATHERED SHALE - very dense, grey, moist		6.0										
		7.0										
		8.0										
		9.0										
		10.0										
		11.0										
		12.0							SS6	65	8.6	
		13.0										
		13.7										

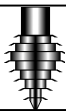
bentonite backfill: 0.0m - 8.9m  
sand backfill: 8.9m - 12.2m

- NOTES:
- screening interval: 9.2m - 12.2m
  - Elevation datum, referenced to the existing catch basin, El. 125.21±m, located southeast of 801 Dundas Street East, as per the site survey plan provided by client.
  - Monitoring well MW7 installed on July 11, 2022 with flush mount covering.
    - 0 - 9.2m riser
    - 9.2 - 12.2m screen
    - 0.0 - 8.9m bentonite backfill
    - 8.9 - 12.2m sand backfill
  - Water levels (depth (elevation), m)
 

July 19, 2022	4.92	(120.9)
July 27, 2022	5.33	(120.5)
August 08, 2022	5.42	(120.4)

120.9 (July 19, 2022)  
120.6  
120.5 (July 27, 2022)  
120.4 (Aug 08, 2022)

END OF BOREHOLE



# HADDAD GEOTECHNICAL INC.

Engineering Data Sheet For Borehole No. 8 and Monitoring Well No. 8

Project No. 22-16145  
Drawing No. 11

Project: Proposed Residential Development		Field Supervision: HR
Location: 799-805 Dundas Street East, Mississauga		
Hole Location: see Drawing No. 1		
Hole Elevation & Datum: 126.4±m, see Note 1		
Start Date: July 15, 2022	End Date: July 15, 2022	

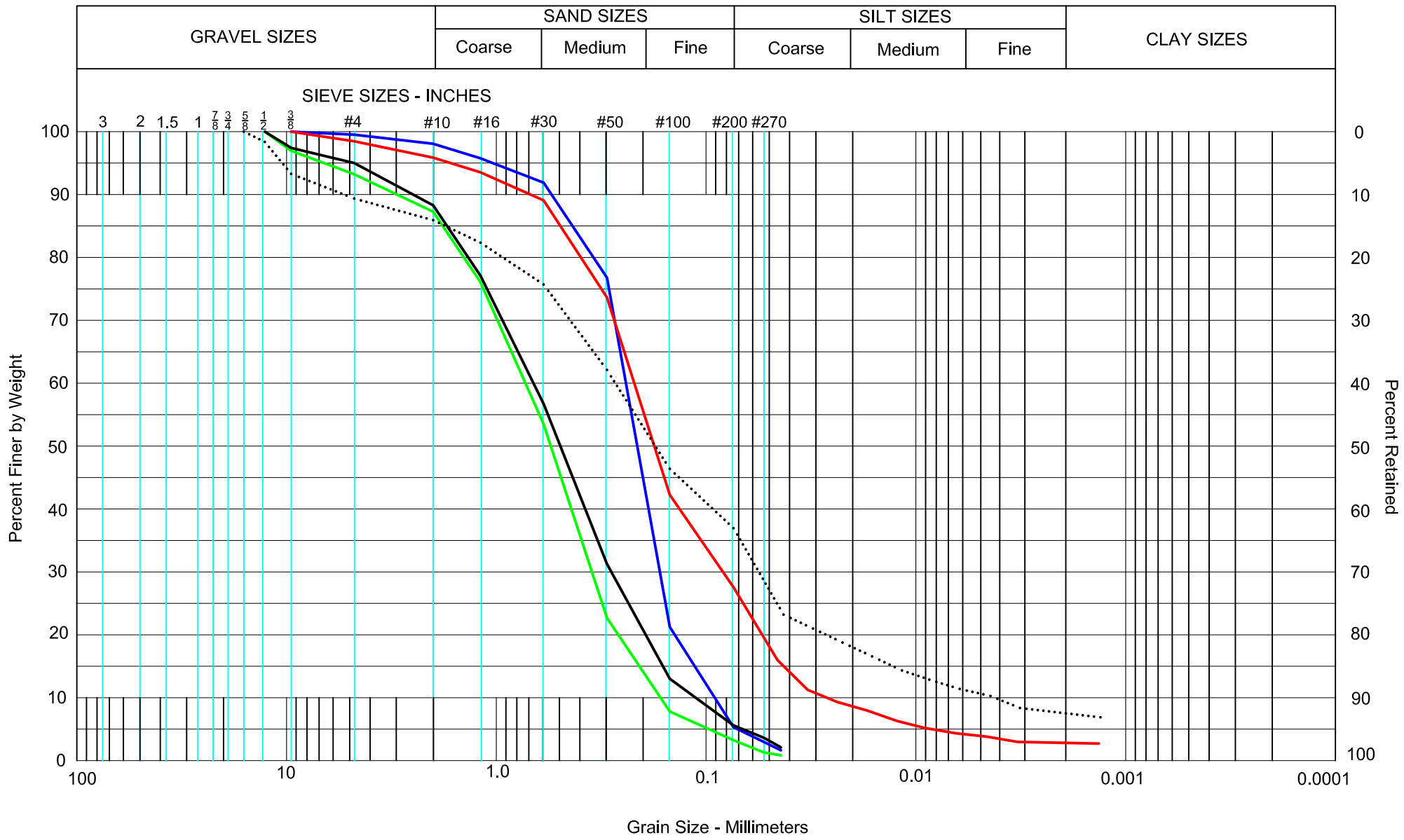
LEGEND		
51 mm dia Split Spoon Sample		Water Level
Auger Sample		
N - Standard Penetration Value		Pocket Penetrometer
Gradation Analysis Completed	M	
No Split Spoon Recovery	NR	

Description	Elev. ±m	Depth ±m	Strength and Penetration Resistance (KPa)					Sample No.	N	Moisture Content %
			0	50	100	150	200			
GROUND SURFACE OF BOREHOLE NO. 8			N Blows/300mm							
			0	20	40	60	80	100		
CONCRETE SLAB - 100±mm FILL MATERIALS - compact sandy silt, trace gravels, crushed stones, brown, moist	126.4	0.0								
bentonite backfill: 0.0m - 2.7m		1.0								
SAND - some gravels, trace silt, dense, layering, brown, moist apparent crushed stones, occ. oxidation seams, and becomes very dense at and below 2.3±m depth below grade	124.9	2.0								
sand backfill: 2.7m - 6.1m screening interval: 3.0m - 6.1m		3.0								
	123.6 (July 19, 2022) 123.5 (July 27, 2022) 123.5 (Aug 08, 2022)									
		4.0								
		5.0								
WEATHERED SHALE - very dense, grey, moist	120.3	6.0								
END OF BOREHOLE	120.1									
		7.0								
		8.0								
		9.0								
		10.0								
		11.0								
		12.0								
		13.0								
		13.7								

- NOTES:
- Elevation datum, referenced to the existing catch basin, El. 126.36±m, located west of 801 Dundas Street East, as per the site survey plan provided by client.
  - Monitoring well MW8 installed on July 15, 2022 with flush mount covering.
    - 0 - 3.0m riser
    - 3.0 - 6.1m screen
    - 0.0 - 2.7m bentonite backfill
    - 2.7 - 6.1m sand backfill
  - Water levels (depth (elevation), m)
 

July 19, 2022	2.84	(123.6)
July 27, 2022	2.84	(123.6)
August 08, 2022	2.89	(123.5)





- BH1 SS3 - (2.3±m to 2.8±m) (4% Gravels, 69% Sand, 24% Silt, 3% Clay)
- BH2 SS3 - (2.3±m to 2.8±m) (2% Gravels, 93% Sand, 5% Silt)
- BH3 SS5 - (4.5±m to 5.0±m) (13% Gravels, 84% Sand, 3% Silt)
- BH5 SS3 - (2.3±m to 2.8±m) (12% Gravels, 82% Sand, 6% Silt)
- ⋯ BH7 SS4 - (3.0±m to 3.5±m) (14% Gravels, 49% Sand, 29% Silt, 8% Clay)

**HADDAD GEOTECHNICAL INC.**  
 151 Amber Street, Unit 17, 18  
 Markham, Ontario L3R 3B3  
 phone: 905-475-0951, fax: 905-475-8338  
 info@haddadgeo.com

799 - 805 DUNDAS STREET EAST, MISSISSAUGA

**GRADATION ANALYSES A.S.T.M. D422  
 NATIVE SUBSOILS**

SCALE: AS INDICATED DRAWN BY: AT	PROJECT: 22-16145 DRAWING No. 12 DATE: JULY 20, 2022
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## **APPENDIX A**

### **Architectural Plans Provided by Client**

Oct. 25, 2022

SURVEYOR'S REAL PROPERTY REPORT  
PART 1:  
CONCESSION 1  
NORTH OF DUNDAS STREET  
CITY OF MISSISSAUGA  
REGIONAL MUNICIPALITY OF PEEL

SCALE 1 : 200

AKSAN PILLER CORPORATION LTD.

PART 2:  
PREPARED FOR: KJC PROPERTIES INC.  
LOCATION OF THE BUILDING: WHOLLY ON THE PROPERTY.  
LAYS: CLAR.  
UTILITY BUILDINGS: AS SHOWN ON PART 1.  
DECK: AS SHOWN ON PART 1.  
SWIMMING POOLS: NONE.  
EXISTING FENCES: GENERALLY ALONG THE PROPERTY LINES, WITH DEVIATIONS AS SHOWN ON PART 1.  
EASEMENTS: AS SHOWN ON PART 1.  
DRAINAGE: AS SHOWN ON PART 1.  
NOTE: SEVERAL PEDESTRIAN WALKWAY ALONG DUNDAS STREET EAST AND HAINES ROAD TRESPASSING ACROSS THE 0.30 RESERVE.

- LEGEND:  
M DENOTES SURVEY MONUMENT FOUND  
M DENOTES SURVEY MONUMENT PLANTED  
S DENOTES STAIRS  
SB DENOTES STAIRS RISE BAR  
CC DENOTES CONCRETE CURB  
WT DENOTES WITNESS MONUMENT  
S(U) DENOTES SOUTH  
E DENOTES EAST  
W DENOTES WEST  
FC DENOTES FENCE  
CLF DENOTES CHAIN LINK FENCE  
BF DENOTES BOARD FENCE  
WF DENOTES WOOD FENCE  
MF DENOTES METAL FENCE  
CB DENOTES CATCH BASIN  
UP DENOTES UTILITY POLE  
TS DENOTES TRAFFIC SIGN  
FH DENOTES FIRE HYDRANT  
HW DENOTES HAND WELL  
C&W DENOTES CONCRETE KNEE WALL  
S&W DENOTES STONE RETAINING WALL  
CB# DENOTES CONCRETE BLOCK RETAINING WALL  
L&P DENOTES LAMP POST  
B DENOTES BILLIARD  
D DENOTES DRIVE  
TC DENOTES TOP OF CURB  
T# DENOTES TOP OF WALL  
GLB DENOTES GROUND LEVEL BOX  
UB# DENOTES UTILITY BOX  
L# DENOTES LABEL BOX  
NS DENOTES NEWSPAPER STAND  
S&N DENOTES SIGN  
WV DENOTES WATER VALVE  
C&C DENOTES CONCRETE  
P# DENOTES PLAN 438-14243  
P# DENOTES PLAN 438-32247  
P# DENOTES PLAN 438-33847  
OBS DENOTES DAVID B. SEARLES SURVEYING, O.L.S.  
\* DENOTES ACCESSIBLE AND OBSTRUCTED  
Ø DENOTES TREE TRUNK DIAMETER  
DENOTES TRANS NORTHERN PIPELINE EASEMENT  
DENOTES SEWER EASEMENT AS IN INST. NO. R0970404

METRIC:  
DISTANCES SHOWN ON THIS PLAN  
ARE IN METRES AND CAN BE CONVERTED  
TO FEET BY DIVIDING BY 0.3048.

BEARING NOTE:  
BEARINGS ARE LISTED DERIVED FROM GNSS OBSERVATIONS,  
USING A REAL TIME KINEMATIC SERVICE ON MONUMENTS 1 & 2.  
SHOWN HEREON HAVE A BEARING OF ±380'03.00",  
AND ARE REFERRED TO THE CENTRAL MERIDIAN OF UTM ZONE 17  
89700 WEST LONGITUDE (NAD 83) (2011).

NOTES:  
DISTANCES ARE GROUND AND CAN BE  
CONVERTED TO GRID DISTANCES BY  
MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996.

POINT ID	NORTHING	EASTING
1	482842.36	613250.65
2	482842.36	613250.65
3	482820.78	613250.65
4	482820.78	613250.65

COORDINATES CANNOT IN THEMSELVES BE USED  
TO RE-ESTABLISH CORNERS OR BOUNDARIES  
SHOWN ON THIS PLAN.  
OBSERVED REFERENCE POINTS (ORP) ARE DERIVED FROM GPS  
OBSERVATIONS USING THE REAL TIME KINEMATIC (RTK) SERVICE.  
UTM ZONE 17, NAD 83 (ICRS) 1997.02.  
COORDINATES ARE TO UTM ACCURACY AS IN SEC. 14 (2),  
OREG. 2187C.

ELEVATIONS NOTE:  
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE DERIVED  
FROM THE CITY OF MISSISSAUGA BENCH MARK 850.  
ELEVATION = 108.24 m.  
ON THE EAST FACE OF THE EAST PARAPET WALL OF THE EAST  
STEPS OF THE ST. JOHN THE BAPTIST ARCHDIACON CHURCH ON  
THE NORTH SIDE OF DUNDAS STREET EAST, 6M EAST OF  
CANTHIE ROAD.

CAUTION:  
THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL SIGNED  
BY THE ARCHITECT.  
AND ARE DEFINED AT 1.4M ABOVE GRADE AT TREE  
FOR AIRBORNE CALIPER REFER TO AIRBORNE REPORT.

SURVEYOR'S CERTIFICATE:  
I CERTIFY THAT:  
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH  
THE SURVEY ACT, THE SURVEYORS ACT AND THE LAND TITLES  
ACT AND THE REGULATIONS MADE UNDER THEM;  
2. THE SURVEY WAS COMPLETED ON THE 30th DAY OF MAY, 2022.

MAY 30, 2022  
G.H. HAINES  
Ontario Land Surveyor  
AKSAN PILLER CORPORATION LTD.  
ONTARIO LAND SURVEYORS  
71 St. George Street, Toronto, Ontario M5E 1A5  
Tel: (416) 593-1111 Fax: (416) 593-1112  
Reference Number: 22-24-14617-00

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By The Architect.

Date:

**KIRKOR**  
ARCHITECTS AND PLANNERS  
20 De Boers Drive Suite 400  
Toronto, ON M3J 0H1

Revisions:  
No.: Revision: Date:

No.	Revision	Date

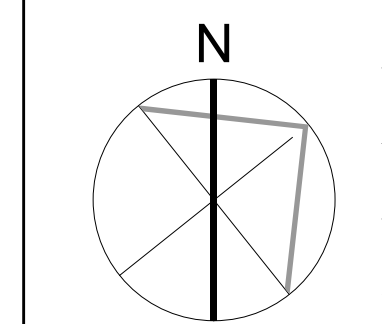
1	Rezoning Submission	Oct. 31, 2022
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No.: Issued For: Date:

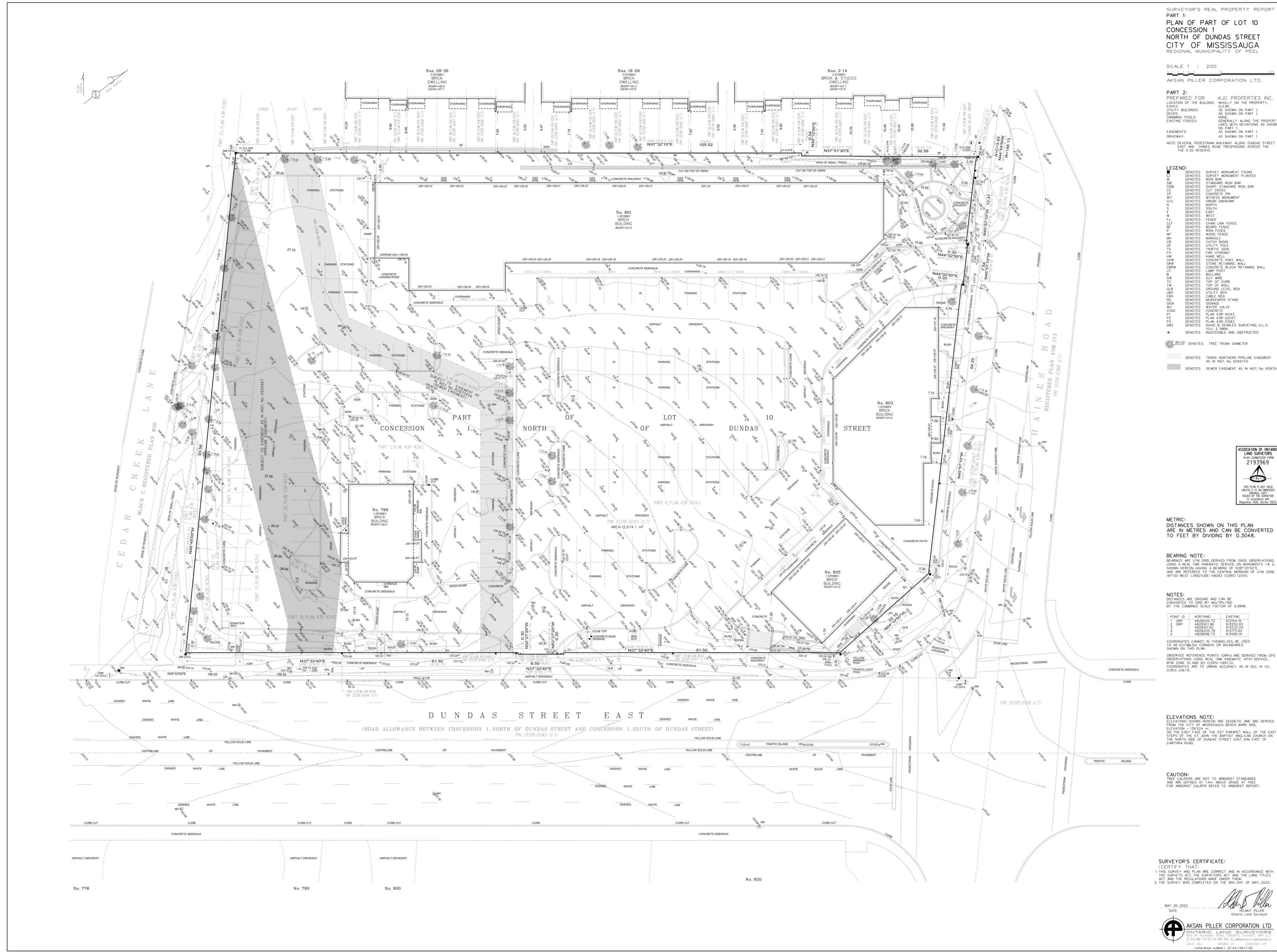
Client:  
**KJC PROPERTIES INC.**  
805 Dundas Street East, Mississauga, ON.  
Proposed Residential Development

Drawing Title:  
**Site Survey**

Scale:  
Drawn by: D.S.  
Checked by: G.H.  
Project No.: 21-115  
Date: Oct. 25, 2022  
Drawing No.:



**dA1.01**



Site Survey 1  
NTS dA1.01

Oct. 25, 2022

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Date:



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Toronto, ON M3J 0H1

Revisions:		Date:
No.:	Revision:	

1	Rezoning Submission	Oct. 31, 2022
---	---------------------	---------------

No.:	Issued For:	Date:
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Client:  
**KJC PROPERTIES INC.**

**805 Dundas Street East, Mississauga, ON.**  
Proposed Residential Development

Drawing Title:  
**Site Plan**

Scale:  
**1 : 250**

Drawn by:  
**G.H.**

Checked by:  
**G.H.**

Project No.:

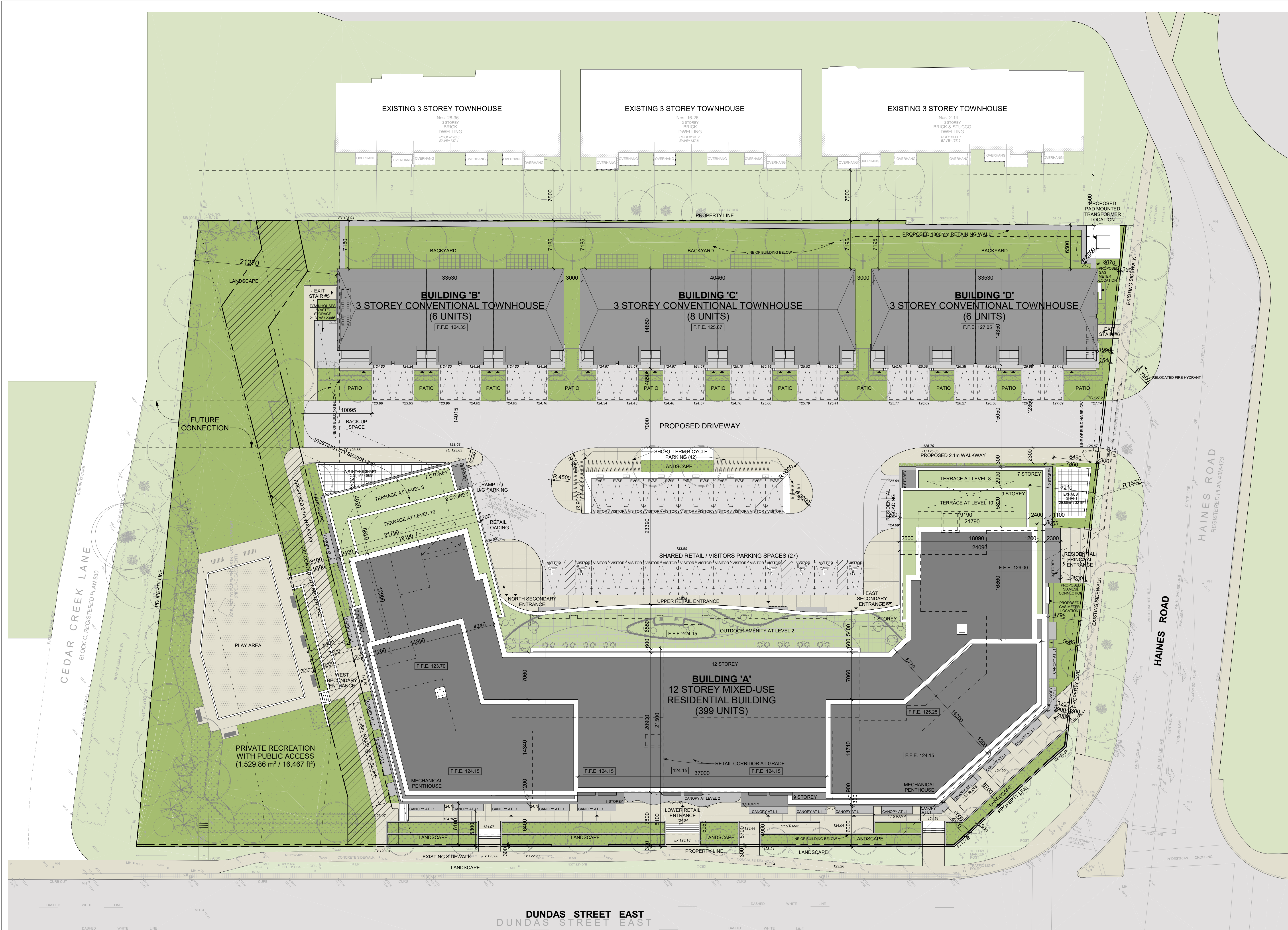
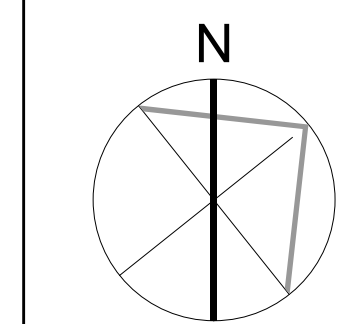
**21-115**

Date:

**Oct. 25, 2022**

Drawing No.:

**dA1.03**



Site Plan **1**  
1 : 250 **dA1.03**

**DUNDAS STREET EAST**  
DUNDAS STREET EAST

Plot Date: 10/25/2022 3:52:20 PM File Path: C:\Users\j2021\1111991\2021\805 Dundas Street East.dwg Plot Date: 10/25/2022 3:52:20 PM

Oct. 25, 2022

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Date:



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Revisions:

No.	Revision	Date
1	Rezoning Submission	Oct. 31, 2022

No.	Issued For	Date
1	Rezoning Submission	Oct. 31, 2022

Client:

KJC PROPERTIES INC.

805 Dundas Street East, Mississauga, ON.  
Proposed Residential Development

Drawing Title:

Parking Floor Plan - Level P2

Scale:

As indicated

Drawn by:

G.H.

Checked by:

G.H.

Project No.:

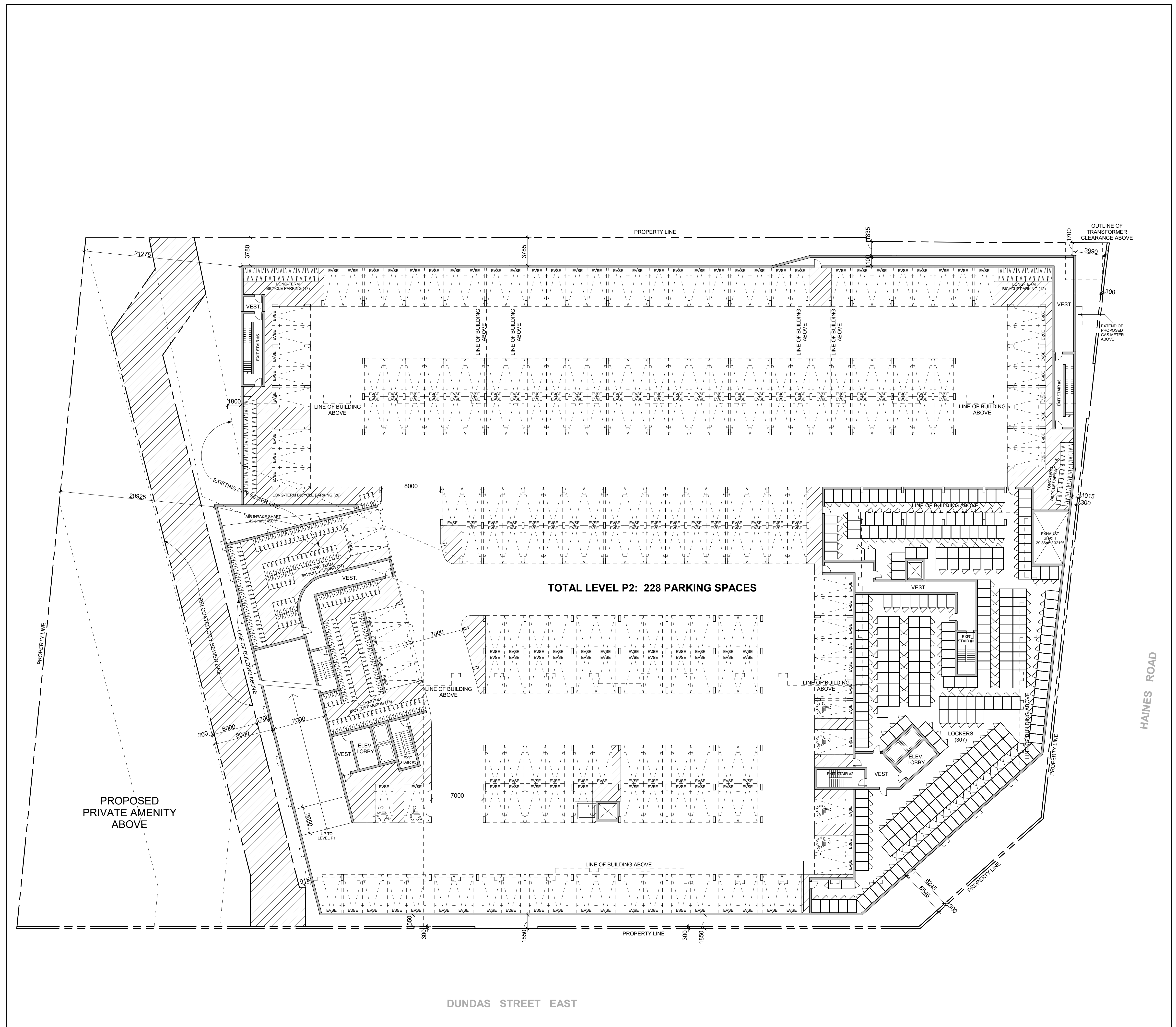
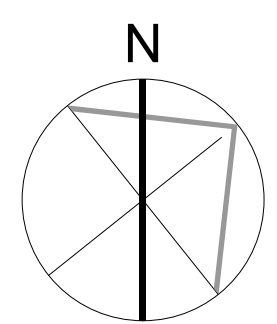
21-115

Date:

Oct. 25, 2022

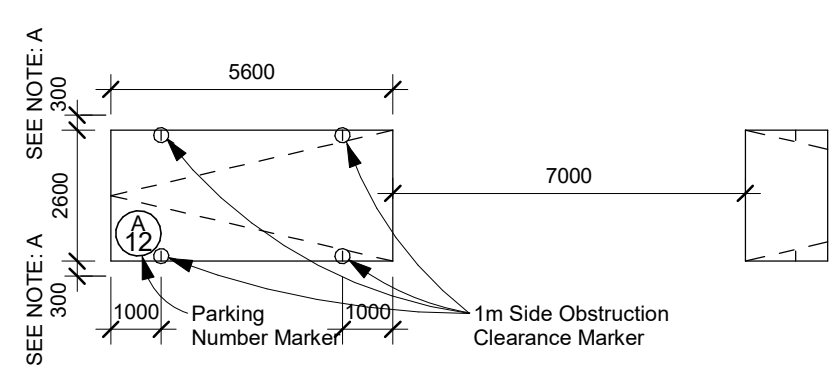
Drawing No.:

dA2.01

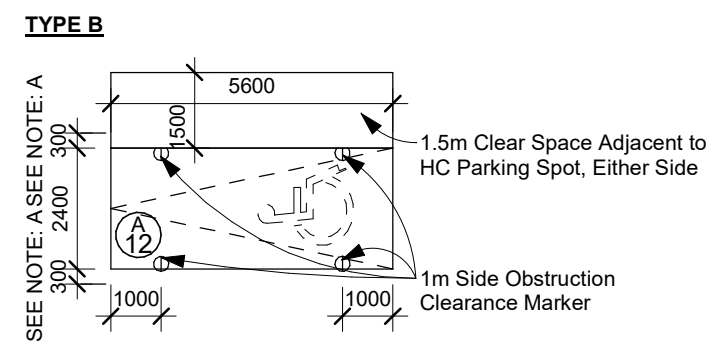
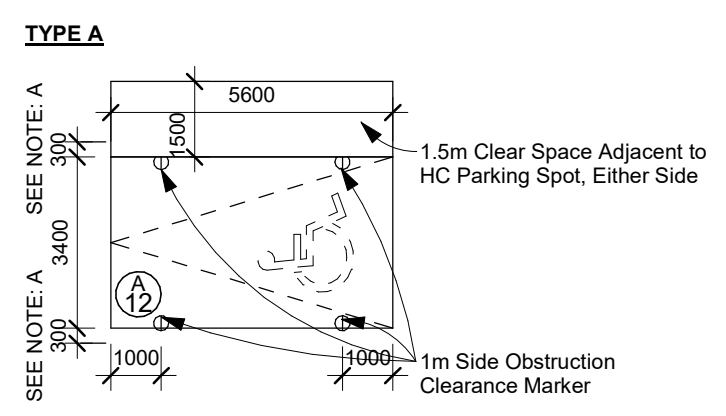


TOTAL LEVEL P2: 228 PARKING SPACES

**TYPICAL PARKING SPACE:**  
Drive Aisle @ 7m min.

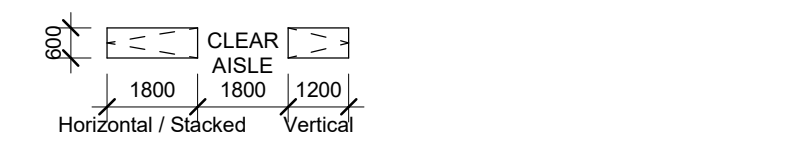


**ACCESSIBLE PARKING SPACE:**



NOTE: A: PROVIDE AN ADDITIONAL 300mm FOR PARKING SPACE WIDTH WHEN OBSTRUCTIONS OCCUR BETWEEN THE FRONT AND REAR 1000mm

**BICYCLE PARKING SPACE LEGEND**



**CONVEX MIRROR**



Parking Space Legend 2  
NTS dA2.01

Floor Plan - Level P2 1  
1 : 250 dA2.01

Oct. 25, 2022

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Date:

# KIRKOR

ARCHITECTS AND PLANNERS

20 De Boers Drive Suite 400  
Toronto, ON M3J 0H1

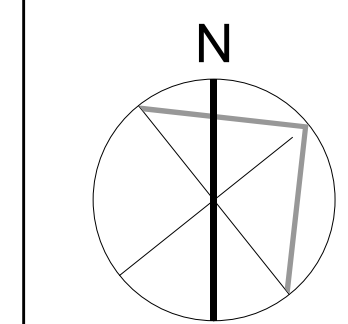
Revisions:		Date:
No.:	Revision:	

1	Rezoning Submission	Oct. 31, 2022
No.:	Issued For:	Date:

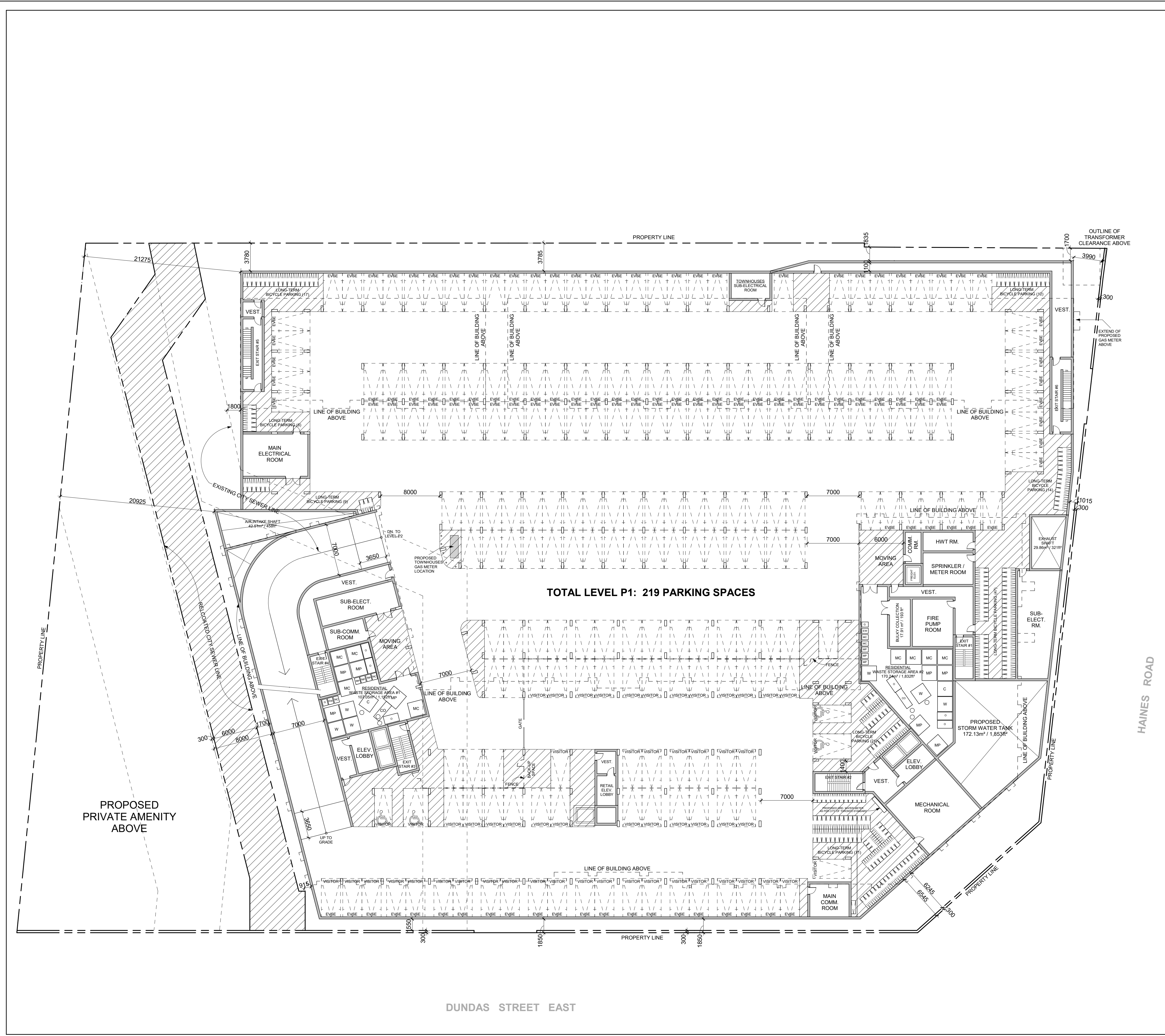
Client:  
**KJC PROPERTIES INC.**  
805 Dundas Street East, Mississauga, ON.  
Proposed Residential Development

Drawing Title:  
**Parking Floor Plan - Level P1**

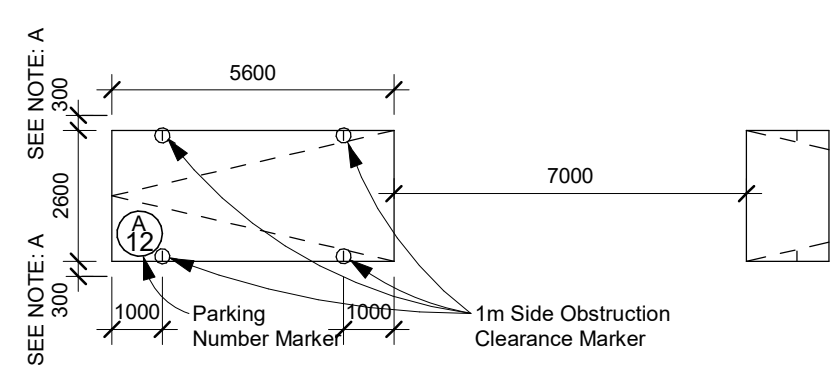
Scale:  
As indicated  
Drawn by:  
G.H.  
Checked by:  
G.H.  
Project No.:  
21-115  
Date:  
Oct. 25, 2022  
Drawing No.:



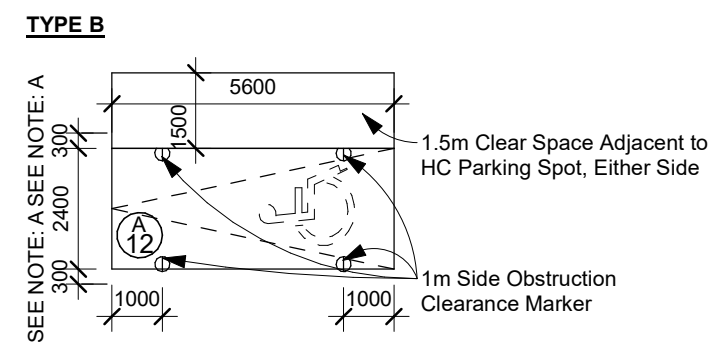
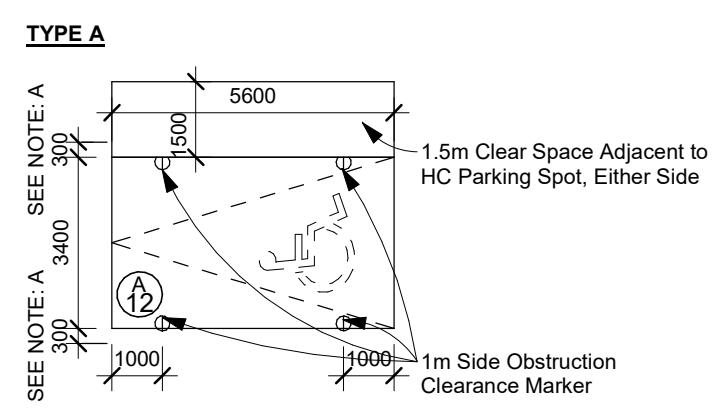
**dA2.02**



**TYPICAL PARKING SPACE:**  
Drive Aisle @ 7m min.

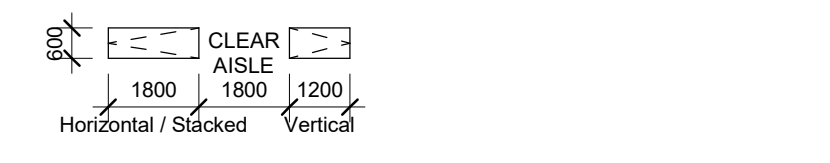


**ACCESSIBLE PARKING SPACE:**



NOTE: A - PROVIDE AN ADDITIONAL 300mm FOR PARKING SPACE WIDTH WHEN OBSTRUCTIONS OCCUR BETWEEN THE FRONT AND REAR 1000mm

**BICYCLE PARKING SPACE LEGEND**



**CONVEX MIRROR**



Parking Space Legend 2  
NTS dA2.02

Floor Plan - Level P1 1  
1 : 250 dA2.02

Oct. 25, 2022

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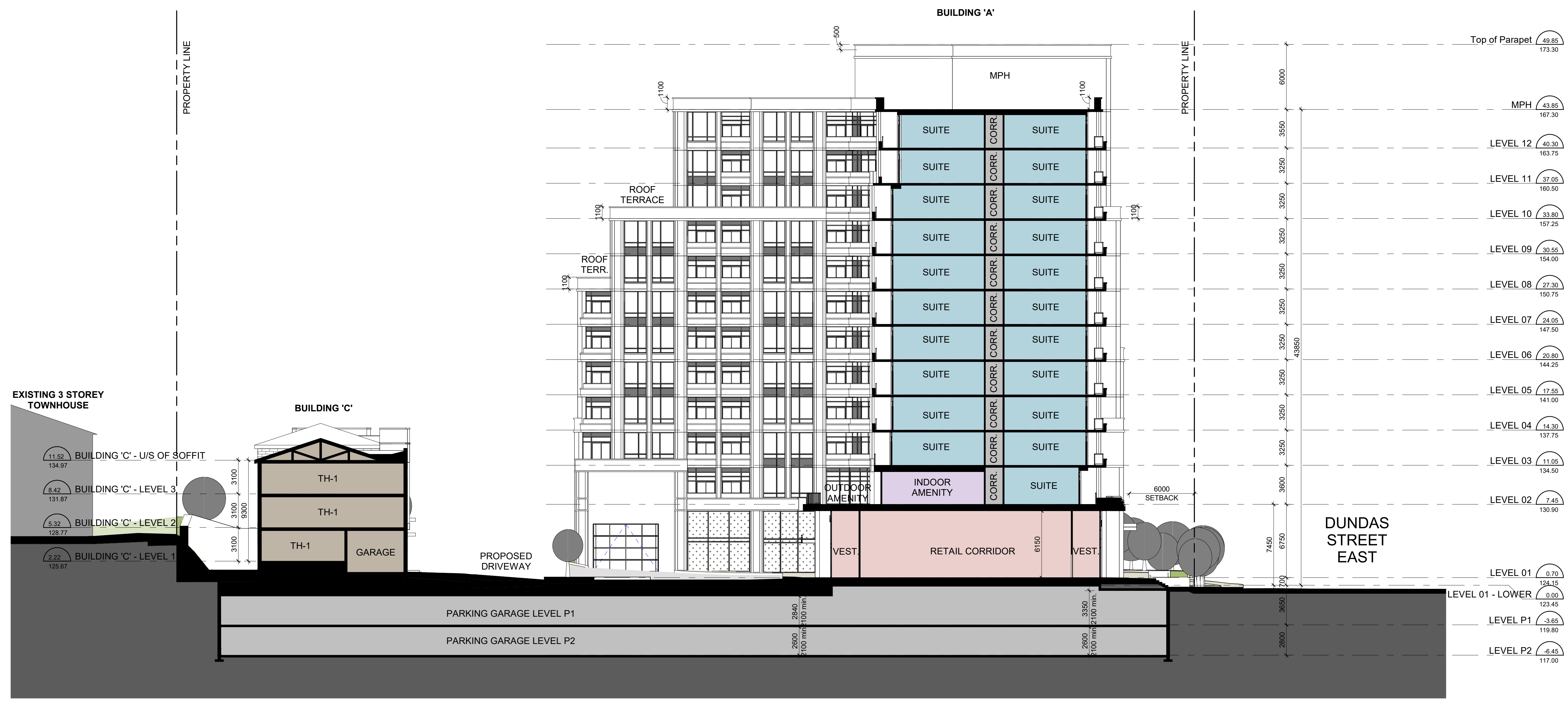
Date:



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Toronto, ON M3J 0H1

Revisions:

No.	Revision	Date



Building Section 'A' 1 : 200

1 dA5.01

dA5.01

Plot Date: 10/26/2022 2:28:13 PM File Path: C:\Users\j2021\OneDrive\Documents\21115\21115.dwg Plot Date: 10/26/2022 2:28:13 PM

Oct. 25, 2022

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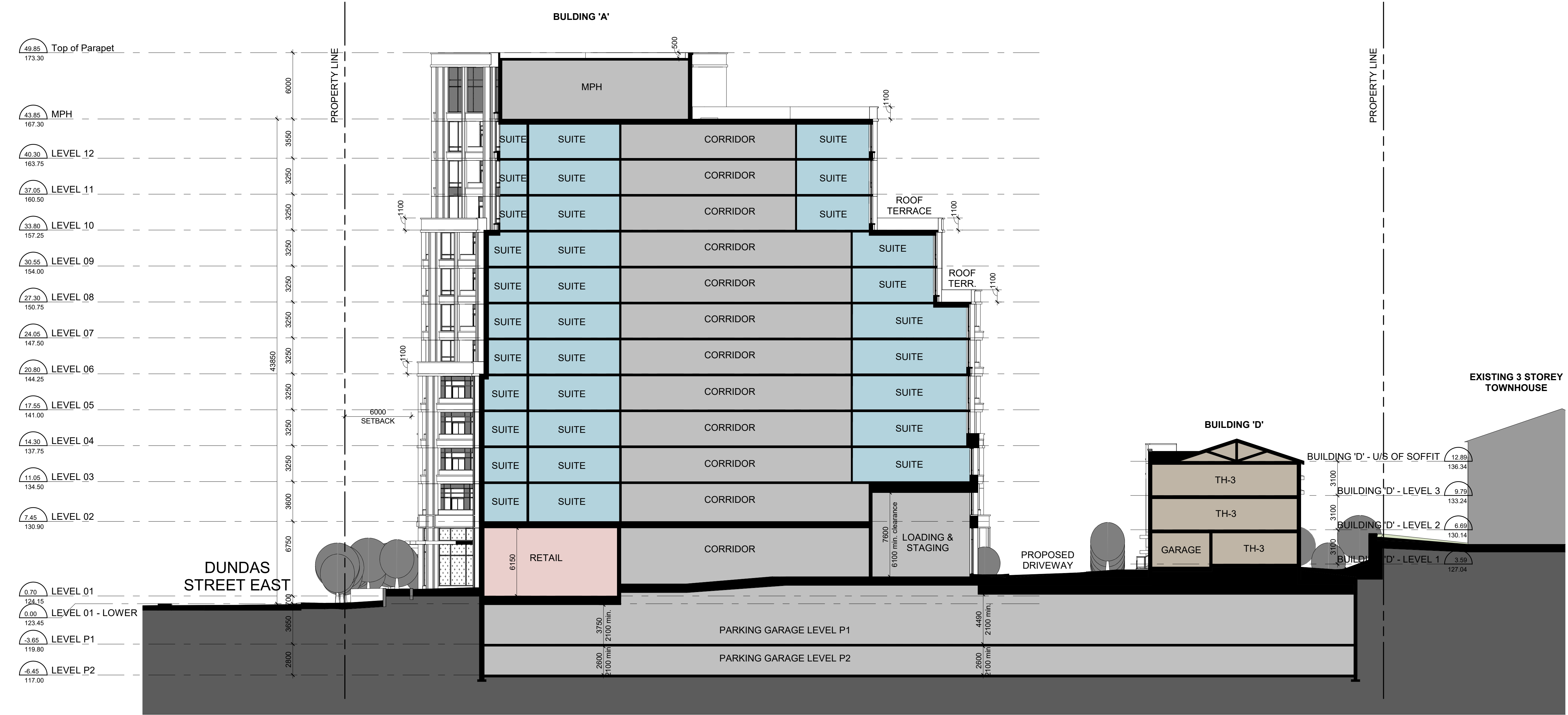
Do not scale the drawings.  
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Date:



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Revisions:		
No.:	Revision:	Date:



49.85	Top of Parapet	173.30
43.85	MPH	167.30
40.30	LEVEL 12	163.75
37.05	LEVEL 11	160.50
33.80	LEVEL 10	157.25
30.55	LEVEL 09	154.00
27.30	LEVEL 08	150.75
24.05	LEVEL 07	147.50
20.80	LEVEL 06	144.25
17.55	LEVEL 05	141.00
14.30	LEVEL 04	137.75
11.05	LEVEL 03	134.50
7.45	LEVEL 02	130.90
0.70	LEVEL 01	124.15
0.00	LEVEL 01 - LOWER	123.45
-3.85	LEVEL P1	119.80
-6.45	LEVEL P2	117.00

12.89	BUILDING 'D' - U/S OF SOFFIT	136.34
9.79	BUILDING 'D' - LEVEL 3	133.24
6.69	BUILDING 'D' - LEVEL 2	130.14
3.59	BUILDING 'D' - LEVEL 1	127.04

Client:  
**KJC PROPERTIES INC.**  
805 Dundas Street East, Mississauga, ON.  
Proposed Residential Development

Drawing Title:  
**Building Section 'B'**  
Scale:  
**1 : 200**  
Drawn by:  
**D.H.**  
Checked by:  
**G.H.**  
Project No.:  
**21-115**  
Date:  
**Oct. 25, 2022**  
Drawing No.:



## **APPENDIX B**

### **Slug Test Results from MW3**



**Haddad Geotechnical Inc.**  
**151 Amber Street, Unit 17**  
**Markham, Ontario, L3R 3B3**

**Slug Test Analysis Report**

Appendix B

Project: 805 Dundas St East

Number: 16145

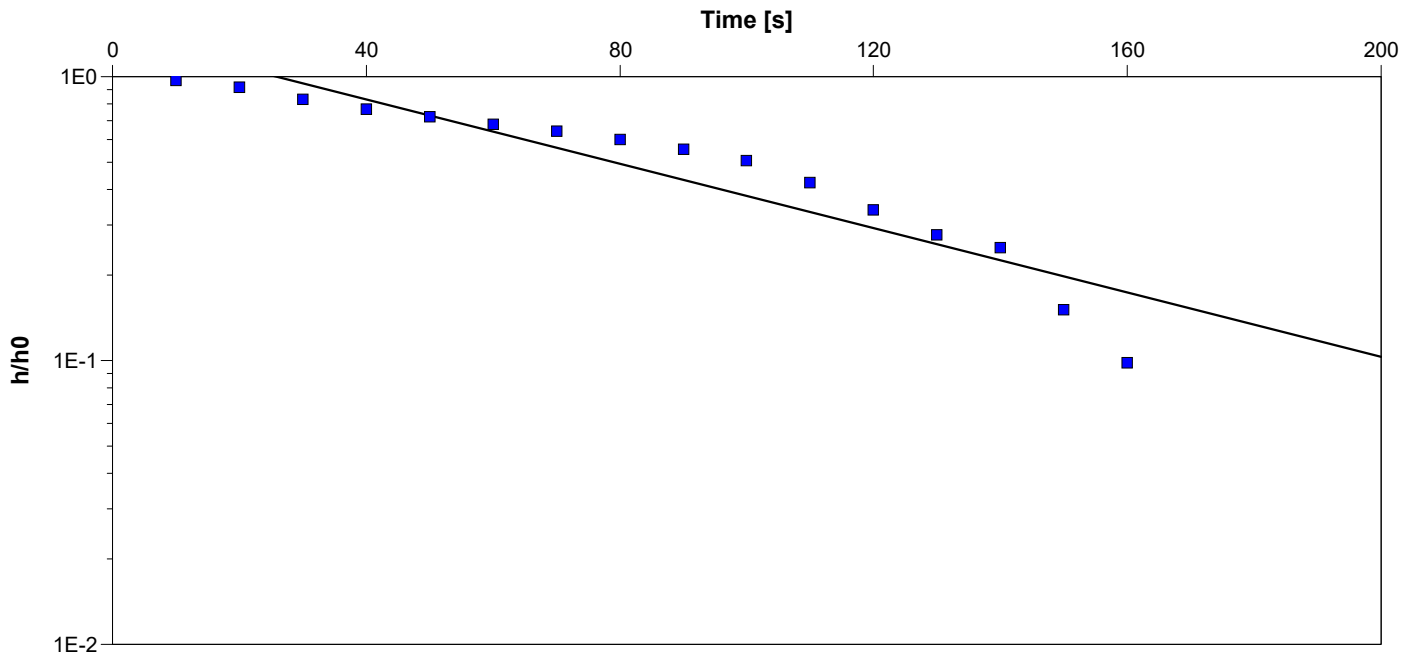
Client:

Location: Mississauga      Slug Test: Slug Test 1      Test Well: Well 1

Test Conducted by: RV      Test Date: 2022-10-13

Analysis Performed by: RV      MW3      Analysis Date: 2022-10-13

Aquifer Thickness: 6.34 m



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]
Well 1	$2.81 \times 10^{-6}$