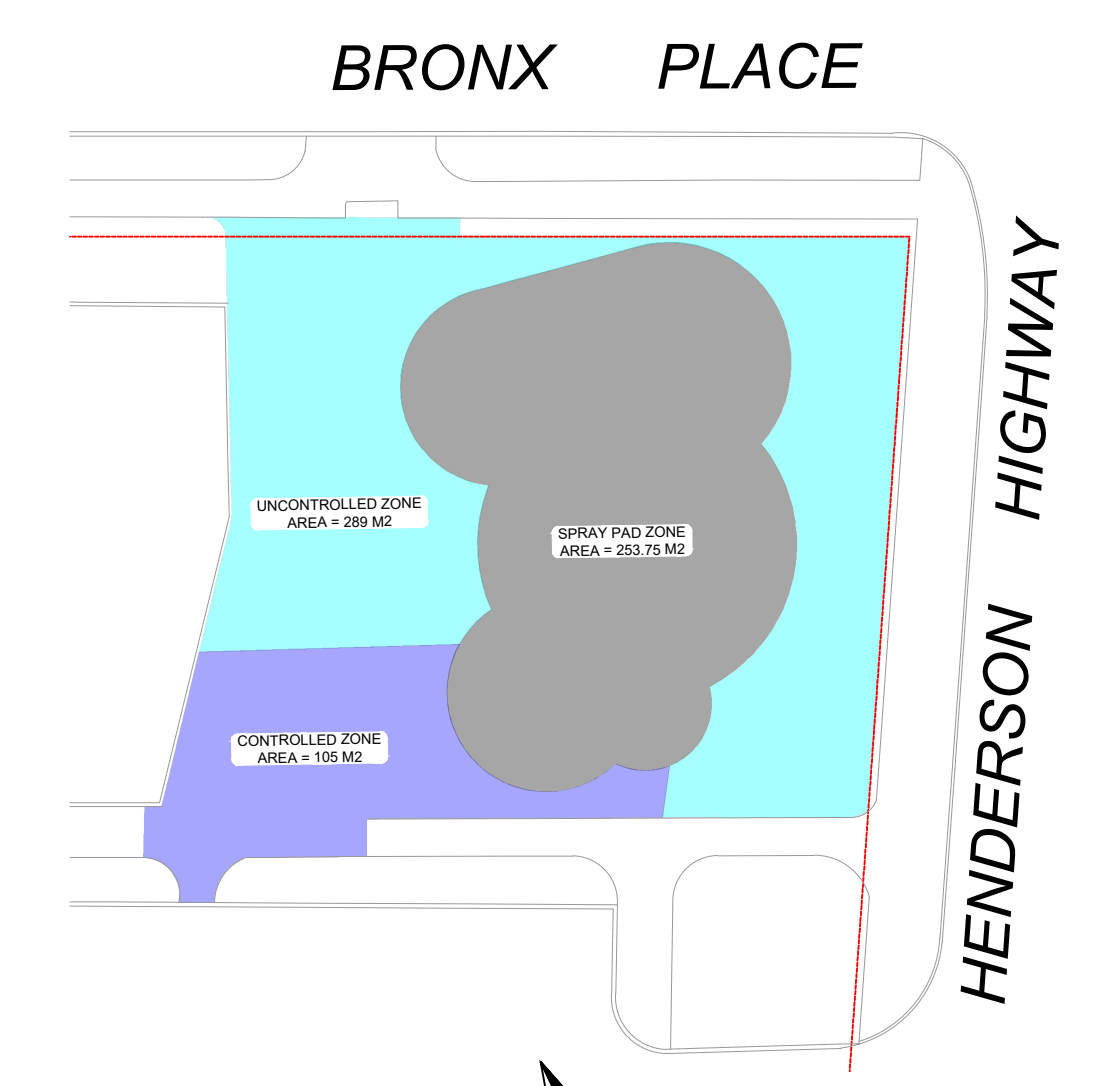


KEY PLAN  
EXISTING CONDITIONS  
1:500



KEY PLAN  
PROPOSED DRAINAGE PATTERNS  
1:300

- Construction Specifications**
- Construction must conform to the City of Winnipeg, *Standard Construction Specifications* and all references contained herein refer to these specifications. "SD" refers to City of Winnipeg standard details.
  - All materials used for construction must conform to City of Winnipeg, *Approved Products for Underground Use Within the City of Winnipeg* except as indicated otherwise.
  - Water Service to CW-2110**
    - All water services to be by saddle connection installed according to CW2110, SD-012.
    - Copper water service shall be in accordance with AWWA C800 and ASTM B888M, Type K, seamless water tubing.
    - Use Class 'B' Bedding where required according to SD-001.
    - Minimum 2.4m burial.
    - For backfilling, refer to SD-002 as follows:
      - Class '5' Backfill in landscaped & untraveled areas
      - Class '2' Backfill in gravel, hard-surfaced & traveled areas
  - Gravity Sewers to CW-2030**
    - All WWS service installation shall be in accordance with CW 2030/2130, SD-014
    - 150mm WWS service pipe shall be in accordance with CAN/CSA B182.2 and ASTM D3034, SDR-35
    - All pipe installations through road right of way shall be completed with trenchless methods. Any open trench construction on site shall be as follows:
      - Class 'B' Bedding to SD-001
      - Backfill to SD-002, Class '2' in gravel, hard-surfaces, and traveled areas; Class '5' in landscaped and untraveled areas.
  - Wastewater Flow Generation:**
    - Spray equipment is design-build by other. Spray features to be sequenced to provide max flow rate of 40-60 US GPM.
  - General Notes**
    - "HP" means high point.
    - Contractor to obtain all necessary permits.
    - Contractor to obtain clearances from all utilities before excavating. Confirm all existing infrastructure information in field before construction. Notify the Engineer immediately of any discrepancies that affect installation or design.
    - Confirm all dimensions before beginning construction.
    - Spray pad internal grading by Landscape Architect.
    - This is a combined sewer district.
    - Civil design to be read in coordination with architectural, structural, building plans, and geotechnical report where appropriate. Contractor is responsible to report any discrepancies to the Engineer or Project Manager.
    - It is the understanding of the engineer that the Bronx Spray Pad will not be subject to additional stormwater management measures, on the condition that the site C-value is not increased, and uncontrolled area is not increase. Based on the analysis of the pre and post surface conditions, these conditions are met.

PLAN GRADING  
1:100

**LEGEND**

	CONCRETE
	GRASS
	ARTIFICIAL TURF

Catchment	Area Takeoff - Pre Development				
	m2	acre	C	% Area	C
C1: Asphalt & Concrete	86	0.02	0.90	56.4%	0.51
C1: Roof	31	0.01	0.95	20.2%	0.19
C1: Gravel	0	0.00	0.50		
C1: Landscaping	36	0.01	0.15	23.4%	0.04
UNC: Asphalt & Concrete	342	0.08	0.90	69.1%	0.62
UNC: Roof	0	0.00	0.95		
UNC: Gravel	0	0.00	0.90		
UNC: Landscaping	153	0.04	0.15	30.9%	0.05
<b>Summary</b>			<b>Weighted C</b>		<b>Overall C</b>
Catchment 1	152	0.04	0.73	23.5%	0.17
Uncontrolled	495	0.12	0.67	76.5%	0.51
<b>Subtotal</b>	<b>647</b>	<b>0.2</b>		<b>100.0%</b>	<b>0.68</b>

Catchment	Area Takeoff - Post Development				
	m2	acre	C	% Area	C
C1: Asphalt & Concrete	52	0.01	0.90	49.9%	0.45
C1: Roof	0	0.00	0.95		
C1: Gravel	0	0.00	0.50		
C1: Landscaping *	52	0.01	0.15	50.1%	0.08
UNC: Asphalt & Concrete	358	0.09	0.90	66.0%	0.59
UNC: Roof	0	0.00	0.95		
UNC: Gravel	0	0.00	0.90		
UNC: Landscaping	185	0.05	0.15	34.0%	0.05
<b>Summary</b>			<b>Weighted C</b>		<b>Overall C</b>
Catchment 1	105	0.03	0.52	16.2%	0.08
Uncontrolled	543	0.13	0.64	83.8%	0.54
<b>Subtotal</b>	<b>647</b>	<b>0.2</b>		<b>100.0%</b>	<b>0.63</b>

\* Landscaping includes artificial turf, considered to have similar runoff characteristics to grass.

<p>This is not a legal plan. Contours shown are approximated for reference only. Whole numbers are millimetres (mm). Decimal numbers are metres (m). Convert Metric to Standard 1.0m = 3.2808ft. This plan is prepared only for the Client and may not be used by any other party without written consent.</p>	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	APPROVING AUTHORITY STAMP  B.M. TOP OF FH ELEV. 231.650		ENGINEER'S SEAL  <b>DEAN SPEARMAN</b>	SHEET OF 1 1 CAD FILE DRAWING NUMBER 23002-C-R3 PROJECT CODE 23-002	
	1.98	SLOPE DIRECTION	2.98%	HYDRANT	CONTOUR						
	(394.98)	SURFACE ELEV.	(239.45)	CURB STOP	PONDING AREA						
	150 WM	WATERMAIN		VALVE	ELEC	ELEC					ELEC
250 WWS	WASTEWATER SEWER	250 WWS	WWS MANHOLE	GAS	GAS	GAS	DESIGNED BY KP CHECKED BY DH DRAWN BY KP APPROVED BY DH HOR. SCALE: AS SHOWN VERTICAL: RELEASED FOR CONSTRUCTION. DATE 2024-03-01	CONSULTANT DRAWING NO. C1	LOT GRADING PLAN <b>BRONX PARK SPRAY PAD</b> 720 HENDERSON HIGHWAY, WINNIPEG, MB		
300 LDS	LAND DRAINAGE SEWER	300 LDS	LDS CATCHBASIN	COMM	COMMUNICATIONS	COMM					
			LDS MANHOLE	TOPO SURVEY POINT			NO. REVISIONS	YYYY.MM.DD.	BY	DATE	