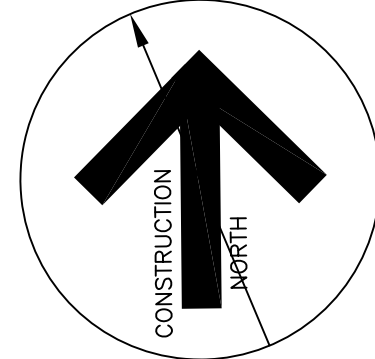


LEGEND

ST	EXISTING STORM SEWER	AD	AREA DRAIN
ST	PROPOSED STORM SEWER	CB	CATCH BASIN
S	EXISTING SANITARY SEWER	COMB	COMBINED
S	PROPOSED SANITARY SEWER	DAD	DOUBLE AREA DRAIN
W	EXISTING WATERMAIN	EX	EXISTING
W	PROPOSED WATERMAIN	FH	FIRE HYDRANT
G	EXISTING GAS MAIN	GW	GUY WIRE
M	VALVE AND BOX	HP	HYDRO POLE
W	WATER METER	MH	MANHOLE
D	BACK FLOW PREVENTER	PROP	PROPOSED
		SAN	SANITARY
		STM	STORM
		TD	TRENCH DRAIN
		VC	VALVE CHAMBER
		WV	WATER VALVE



GENERAL SERVICING NOTES:

1. ALL SERVICES TO BE INSTALLED AS PER CITY OF HAMILTON CONSTRUCTION AND MATERIAL SPECIFICATIONS MANUAL (LATEST EDITION) AND MINISTRY OF THE ENVIRONMENT GUIDELINES (LATEST EDITION).
2. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER SERVICES AND SEWERS SHALL BE 2.5m MEASURED FROM THE CLOSEST PIPE EDGE TO CLOSEST PIPE EDGE. VERTICAL SEPARATION BETWEEN WATERMANS AND SEWERS WHICH CROSS MUST BE 0.5m BETWEEN THE OUTSIDE OF THE WATERMAN AND THE OUTSIDE OF THE SEWER, WITH THE LENGTH OF THE WATER PIPE BEING CONTROLLED AT THE POINT OF CROSSING SUCH THAT JOINTS IN THE WATERMAN WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER, CROSSING PERPENDICULAR IF POSSIBLE.
3. ALL WATER SERVICES TO BE INSTALLED WITH A MINIMUM OF 1.6m COVER. SEWERS TO BE INSTALLED WITH A MINIMUM COVER OF 2.20m AT THE PROPERTY LINE BELOW THE FINAL ROAD GRADE OR AT SUCH HIGHER ELEVATION ONLY AS MAY BE NECESSARY BY THE LEVEL OF THE MAIN SEWER. ON PRIVATE PROPERTY THE MINIMUM COVER IS TO BE NO LESS THAN 1.2m.
4. RESTORATION OF ROAD OVER UTILITY CUTS IN HAMILTON TO BE AS PER STANDARD DRAWINGS RD-100.01 AND RD-100.02, WITH GRANULAR "A" BEDDING.
5. APPROVAL OF THIS DRAWING IS FOR MATERIAL ACCEPTABILITY AND COMPLIANCE WITH MUNICIPAL AND PROVINCIAL SPECIFICATIONS AND STANDARDS ONLY. APPROVAL AND INSPECTION BY THE CITY OF HAMILTON DOES NOT CERTIFY THE LINE AND GRADE OF THE WORKS AND IT IS THE OWNER'S RESPONSIBILITY TO HAVE THEIR ENGINEER CERTIFY THIS ACCORDINGLY.
6. ALL PROPOSED SERVICE ARE TO PASS BELOW EX. WATERMANS, BY A MIN. OF 250mm, BASED ON THE TOP OF THE EX. WATERMAN BEING 1.6m BELOW THE CENTERLINE OF ROAD.
7. ALL BUILDING SERVICE SIZES ARE TO BE CONFIRMED BY THE MECHANICAL ENGINEER AT BUILDING DESIGN PHASE.

BEFORE STARTING WORK

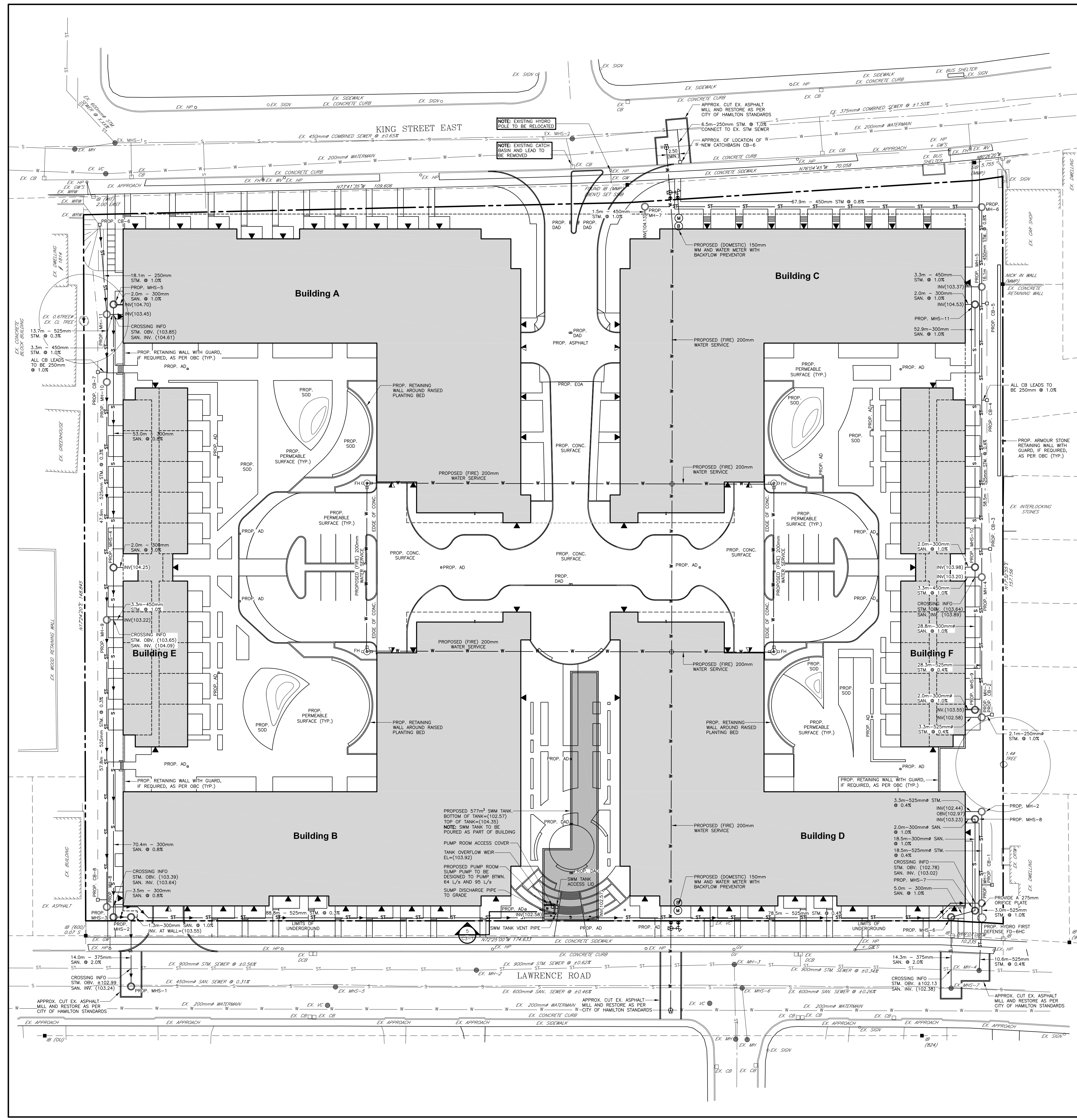
1. THE CONTRACTOR SHALL NOTIFY THE CITY OF HAMILTON AND LANHACK CONSULTANTS INC. AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
2. THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ALL BENCHMARKS, ELEVATIONS, DIMENSIONS, AND GRADES MUST BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE ENGINEER.
4. ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE LOCATED, MARKED AND PROTECTED. ANY UTILITIES DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
5. AT LEAST TWO DIFFERENT BENCHMARKS MUST BE REFERRED TO AT ALL TIMES.

STORM STRUCTURES

NAME	STANDARD OPSD	T/G	INVERTS				COMMENTS
			North	South	East	West	
EX MH-4	-	EX	102.11	-	+101.21	+101.21	Drop Structure
FD-6HC	-	EX	105.75	102.17	102.15	-	Hydro First Defence HC OGS
MH-1	701.010	105.80	102.30	102.20	-	102.25	
MH-2	701.010	105.88	102.37	-	-	102.42	
MH-3	701.010	106.84	102.98	-	-	103.20	
MH-4	701.010	107.78	103.12	103.10	-	103.18	
MH-5	701.010	108.32	103.34	103.26	-	103.34	
MH-6	701.010	107.90	-	103.47	-	103.52	
MH-7	701.010	106.01	-	104.11	104.06	-	
CB-1	705.010	105.45	-	-	-	103.95	w/ Beehive Gate
CB-2	705.010	106.80	-	-	-	103.22	w/ Beehive Gate
CB-3	705.010	107.56	-	-	-	106.06	w/ Beehive Gate
CB-4	705.010	107.56	-	-	-	106.06	w/ Beehive Gate
CB-5	705.010	107.70	-	-	-	106.20	w/ Beehive Gate
MH-8	701.010	106.40	102.91	-	-	102.87	103.45
MH-9	701.010	108.11	103.12	103.10	103.18	-	
MH-10	701.010	106.98	103.29	103.27	-	-	
MH-11	701.010	107.18	103.61	103.33	103.41	-	
CB-6	705.010	105.20	-	103.79	-	-	w/ Beehive Gate
CB-7	705.010	106.85	-	-	105.35	-	w/ Beehive Gate
CB-8	705.010	106.20	-	-	-	104.70	w/ Beehive Gate

SANITARY STRUCTURES

NAME	STANDARD OPSD	T/G	INVERTS				COMMENTS
			North	South	East	West	
MHS-1	701.010	MATCH	103.17	-	+102.45	+102.45	Drop Structure
MHS-2	701.010	106.34	-	103.45	103.53	103.53	
MHS-3	701.010	106.32	103.61	-	-	103.56	
MHS-4	701.010	108.00	104.20	104.18	104.23	-	
MHS-5	701.010	107.20	-	104.63	104.68	-	
EX MHS-7	-	EX	102.31	-	+101.83	+101.83	
MHS-6	701.010	105.70	102.90	102.60	-	-	
MHS-7	701.010	105.80	103.00	-	-	102.95	
MHS-8	701.010	105.97	-	103.19	-	103.21	
MHS-9	701.010	106.86	103.62	-	-	103.57	
MHS-10	701.010	107.75	103.93	103.91	-	103.96	
MHS-11	701.010	108.27	-	104.46	-	104.51	



Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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SOURCE: EXISTING BOUNDARY SURVEY AND TOPOGRAPHICAL INFORMATION OBTAINED FROM A.T. McLEAREN LTD., DWG No. 28975, DATED AUGUST 20, 2020.

THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

Revision Record

No.	Description	Date (m/d/y)
A	ISSUED AS PER CITY COMMENTS	02/11/22

Issue Record

No.	Description	Date (m/d/y)
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NOT FOR CONSTRUCTION

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NHDGI Pulse Residential Development

1842 KING STREET EAST
 HAMILTON, ON

Date: MARCH 2021
 Drawn By: GRW
 Chkd By: SMP
 Scale: 1 : 400

Preliminary Servicing Plan

Project No.: 20064A Drawing No.: C2-1 Rev.: A
 Plot Date: 02/11/22
 1842 KING STREET EAST, NHDGI AND PULSE
 20064A_001 - Grading and Servicing Plan.dwg