# **GENERAL NOTES:**

- 1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- 2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS
- 3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION. 4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$2,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS
- 5. RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD
- ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER. 6. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- 7. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- 8. ALL ELEVATIONS ARE GEODETIC. THE SITE BENCHMARKS ARE THE FIRE HYDRANT TOP OF SPINDLE . BM NO.1 IS LOCATED APPROXIMATELY 105m FROM MERIVALE RD AND CLYDE AVE INTERSECTION, LOCATED ON THE EAST SIDE OF CLYDE AVE. BM NO.2 IS LOCATED AT THE EAST SIDE OF CLYDE AVE AND APPROXIMATELY 155m FROM BASELINE ROAD AND CLYDE AVE INTERSECTION.(BM NO. 1 ELEV = 95.96, BM NO. 2 ELEV = 96.25). REFER TO ANNIS, O'SULLIVAN, VOLLEBEKK LTD. TOPOGRAPHICAL PLAN OF SURVEY PART OF LOTS 18 AND 19, 20 AND 21 REGISTERED PLAN 30 CITY OF OTTAWA.
- 9. REFER TO GEOTECHNICAL INVESTIGATION REPORT PATERSON GROUP, REPORT PG5561-1, DATED FEBRUARY 23, 2021 FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE
- 10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND
- 11. REFER TO THE STORMWATER MANAGEMENT REPORT No. \*\*\*, DATED \*\*\*\* 00, 2022 PREPARED BY NOVATECH.
- 12. SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS
- 13. PROVIDE LINE/PARKING PAINTING.

(R10 AND R25).

- 14. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, T/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.
- 15. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.

#### SEWER NOTES:

1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.

SPECIFICATIONS:		
<u>ITEM</u>	SPEC. No.	REFERENCE
SANITARY/STORM/CATCHBASIN MANHOLE (1200Ø)	701.010	OPSD
STORM MANHOLE (1500Ø)	701.011	OPSD
STORM MANHOLE (1800Ø)	701.012	OPSD
CATCHBASIN (600x600)	705.010	OPSD
DOUBLE CATCH BASIN (600 X 1450)	705.020	OPSD
CATCHBASIN FRAME AND COVER	400.020	OPSD
STORM/SANITARY MH FRAME	S25	CITY OF OTTAWA
SANITARY COVER	S24	CITY OF OTTAWA
STORM COVER (CLOSED)	S24.1	CITY OF OTTAWA
STORM COVER (OPEN)	S28.1	CITY OF OTTAWA
SEWER TRENCH	S6 &S7	CITY OF OTTAWA
STORM SEWER < 450mmØ	PVC DR 35(UNLESS SPECIFIED OT	HERWISE)
STORM SEWER >= 450mmØ	CONC 65D (UNLESS SPECIFIED OT	HERWISE)
SANITARY SEWER	PVC DR 35	CITY OF OTTAWA
CATCHBASIN LEAD	PVC DR 35	
CATCHBASIN COVER	S19	CITY OF OTTAWA
ROAD SUBDRAIN (CONTINUOUS)	R1	CITY OF OTTAWA
WATERTIGHT FRAME & COVER	401.030	OPSD

- 2. INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 2.0m COVER WITH 50mmX1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION (REFER TO DETAIL)
- 3. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0% (2.0% PREFERRED) 4. ALL STORM AND SANITARY LATERALS SHALL BE EQUIPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14,1 OR S14.2.
- 5. A MINIMUM OF 150 mm OF OPSS GRANULAR A SHOULD BE PLACED FOR BEDDING FOR SEWER OR WATER PIPES WHEN PLACED ON SOIL SUBGRADE. IF THE BEDDING IS PLACED ON BEDROCK, THE THICKNESS OF THE BEDDING SHOULD BE INCREASED TO 300 mm FOR SEWER PIPES. THE BEDDING SHOULD EXTEND TO THE SPRING LINE OF THE PIPE. COVER MATERIAL, FROM THE SPRING LINE TO A MINIMUM OF 300 mm ABOVE THE OBVERT OF THE PIPE SHOULD CONSIST OF OPSS GRANULAR A (CONCRETE OR PSM PVC PIPES) OR SAND (CONCRETE PIPE). THE BEDDING AND COVER MATERIALS SHOULD BE PLACED IN MAXIMUM 225 mm THICK LIFTS AND COMPACTED TO 95% OF THE SPMDD. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED
- 6. WHERE HARD SURFACE AREAS ARE CONSIDERED ABOVE THE TRENCH BACKFILL, THE TRENCH BACKFILL MATERIAL WITHIN THE FROST ZONE (ABOUT 1.8 m BELOW FINISHED GRADE) SHOULD MATCH THE SOILS EXPOSED AT THE TRENCH WALLS TO REDUCE THE POTENTIAL DIFFERENTIAL FROST HEAVING. THE TRENCH BACKFILL SHOULD BE PLACED IN MAXIMUM 300 mm THICK LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95% OF THE SPMDD.
- 7. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
- 8. ALL STORM MANHOLES MANHOLES WITH PIPE SIZES LESS THAN 900mm ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED. ALL STORM MANHOLES WITH PIPE SIZES 900mm AND LARGER ARE TO BE BENCHED.
- 9. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS 200mm OR GREATER IN DIAMETER PRIOR TO BASE COURSE ASPHALT TO ENSURE THAT THEY ARE CLEAN AND OPERATIONAL. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES AND RE CCTV PRIOR TO ACCEPTANCE. OBTAIN APPROVAL FROM THE CITY'S SEWER OPERATIONS. PROVIDE THE CCTV INSPECTION AND REPORT TO THE ENGINEER FOR
- REVIEW AND APPROVAL. 10. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL APPLICABLE SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS,
- SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS AND ANY ALIGNMENT CHANGES, ETC. 11. THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL
- 12. ALL CATCHBASINS AND CATCHBASIN MANHOLES TO BE PROVIDED WITH MINIMUM 3 METER LONG PERFORATED SUBDRAINS EXTENDING IN TWO DIRECTIONS AT THE SUBGRADE LEVEL. SUBDRAIN IS TO BE PROVIDED AT THE TRANSITIONS BETWEEN DIFFERENT PAVEMENT COMPOSITIONS. THE SUBGRADE SURFACE SHOULD BE SHAPED TO PROMOTE WATER FLOW TO THE
- 11. ALL WORKS SHALL BE PERFORMED AS APPLICABLE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SPECIFICATIONS, AND IN PARTICULAR O.P.S.S. 407 AND 410.

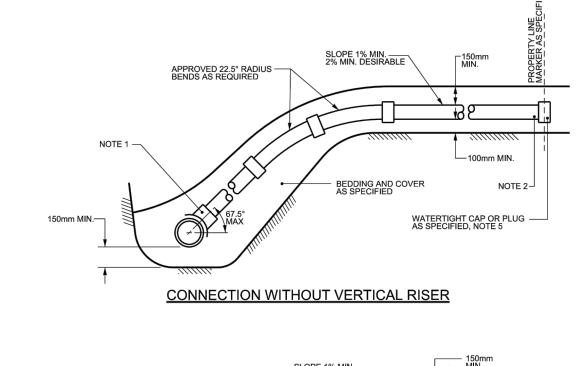
## WATERMAIN NOTES:

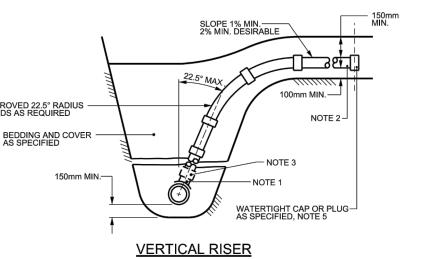
1. SUPPLY AND CONSTRUCT ALL WATERMAIN AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.

SPECIFICATIONS:		
<u>ITEM</u>	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
THERMAL INSULATION BY OPEN STRUCTURES	W23	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN CROSSING ABOVE SEWER	W25.2	CITY OF OTTAWA
HYDRANT	WSD-24	CITY OF OTTAWA
VALVE AND VALVE BOX	WSD-19	CITY OF OTTAWA
WATERMAIN	PVC DR 18	

ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.

- 3. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARD AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. ANY WATERMAIN WITH LESS THAN 2.4m COVER TO BE INSULATED PER THE SEWER AND WATERMAIN NOTES AND DETAIL
- 4. PROVIDE MINIMUM CLEARANCE, BETWEEN OUTSIDE OF PIPES, AT ALL CROSSINGS AS PER CITY DETAILS W25 AND W25.2. WATERMAIN MUST HAVE A MINIMUM VERTICAL CLEARANCE OF 0.25m OVER AND 0.50m UNDER SEWERS AND ALL OTHER
- UTILITIES WHEN CROSSING. 5. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE
- 6. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS CITY OF OTTAWA STANDARD DETAILS WSD-39, 40, 41, 42, 43 AND
- 8. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.





- . ALL DIAMETERES OF SERVICE CONNECTIONS THAT HAVE NOMINAL DIAMETERS NO GREATER THAN 50% OF THE NOMINAL DIAMETER OF THE RIGID SEWER PIPE SHALL BE MADE USING A BELL END INSERT AS PER \$11.2 OR AN APPROVED RUBBER GASKETED INSERT, INSTALLED ABOVE THE SPRING LINE.
- APPROVED CONTROLLED SETTLEMENT JOINTS OPTIONAL FOR SERVICE CONNECTIONS TO MAIN SEWERS UP TO 5m DEEP. WHERE APPROVED, CONNECTIONS TO SEWERS OVER 5m DEEP REQUIRE APPROVED CONTROLLED SETTLEMENT JOINTS. VERTICAL RISER SHALL BE SAME AS SERVICE PIPE UNLESS OTHERWISE SPECIFIED.

FOR RIGID MAIN SEWER PIPE

(MODIFIED OPSD-1006.010)

(SEE NOTE 9)

— SEE NOTES FOR SLOPES

25mm CLEAR STONE

INSULATION

THICKNESS

GEOTEXTILE - SEE NOTE 4 (300mm OVERLAP ON TOP)

APPROVED HDPE PERFORATE SMOOTH INNER WALL PIPE WITH FILTER SOCK 250mm MIN.

S29

5. CAP OR PLUG AT THE PROPERTY LINE SHALL BE ADEQUATELY BRACED TO WITHSTAND TESTING PRESSURE. 6. FOR NEW CONSTRUCTION, INSERTS MUST BE INSTALLED ON THE MAIN PIPE BEFORE THAT PIPE IS LAID.

	SEWER SERVICE CONNECTIONS	
8. ALL DIMENSIONS ARE IN MILI	LIMETRES UNLESS OTHERWISE SHOWN.	
7. APPROVED CUT-IN TOOL MU	ST BE USED FOR FIELD MADE CONNECTIONS.	
FOR SERVICES/BRAINCHES 3	75mm bia. OR LESS, APPROVED CORED TEES MAY BE USED.	

STORM SEWER

1. SIDE SLOPE OF SWALE - MIN. 1.5%, MAX. 3:1.

8. MAXIMUM REAR YARD WATER DEPTH IS 300mm.

1. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 2.0m COVER AND ALL WATERMAIN WITH

LESS THAN 2.4m OF COVER WITH EXPANDED

POLYSTYRENE INSULATION AS PER OPSD 2. THE THICKNESS OF INSULATION SHALL BE THE

EQUIVALENT OF 25mm FOR EVERY 300mm

COVER WITH 50mm MINIMUM (SEE TABLE)

REDUCTION IN THE REQUIRED DEPTH OF

T = THICKNESS OF INSULATION (mm)

W = WIDTH OF INSULATION (mm)

W = D + 300 (1000 min.)  $D = O.D OF PIPE (mm)^{\prime}$ 

LONGITUDINAL SLOPE OF SWALE WITHOUT PERFORATED PIPE 1.5% MIN.

7. GEOTEXTILE SHALL BE APPROVED NON-WOVEN CLASS 1 OR AS SPECIFIED.

**SEWER & WATERMAIN INSULATION NOTES:** 

3. LONGITUDINAL SLOPE OF SWALE WITH PERFORATED PIPE 0.5% MIN. WITH 1% OR GREATER PREFERRED.

5. CB "T" TO BE SPACED ABOUT EVERY 20 TO 25m AND LOCATED 1m OFF REAR YARD AND SIDE YARD PROPERTY LINES.

4. UNDER DRIVEWAYS NON PERFORATED PIPE TO BE USED WITH 75mm BEDDING AND BACKFILLED WITH APPROVED NATIVE MATERIAL.

PERFORATED PIPE INSTALLATION

FOR REAR YARD AND

LANDSCAPING APPLICATIONS

SEWER / WATER

2000-1700 / 2400-2100

1700-1400 / 2100-1800

1400-1100 / 1800-1500

(min.)

BACKFILL AS SPECIFIED

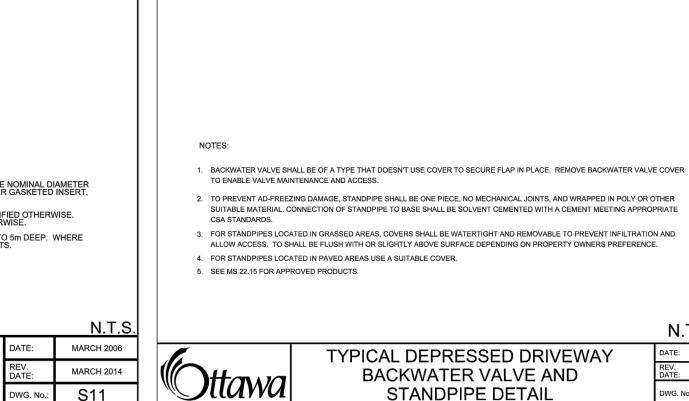
BEDDING AS SPECIFIED

ti INSULATION

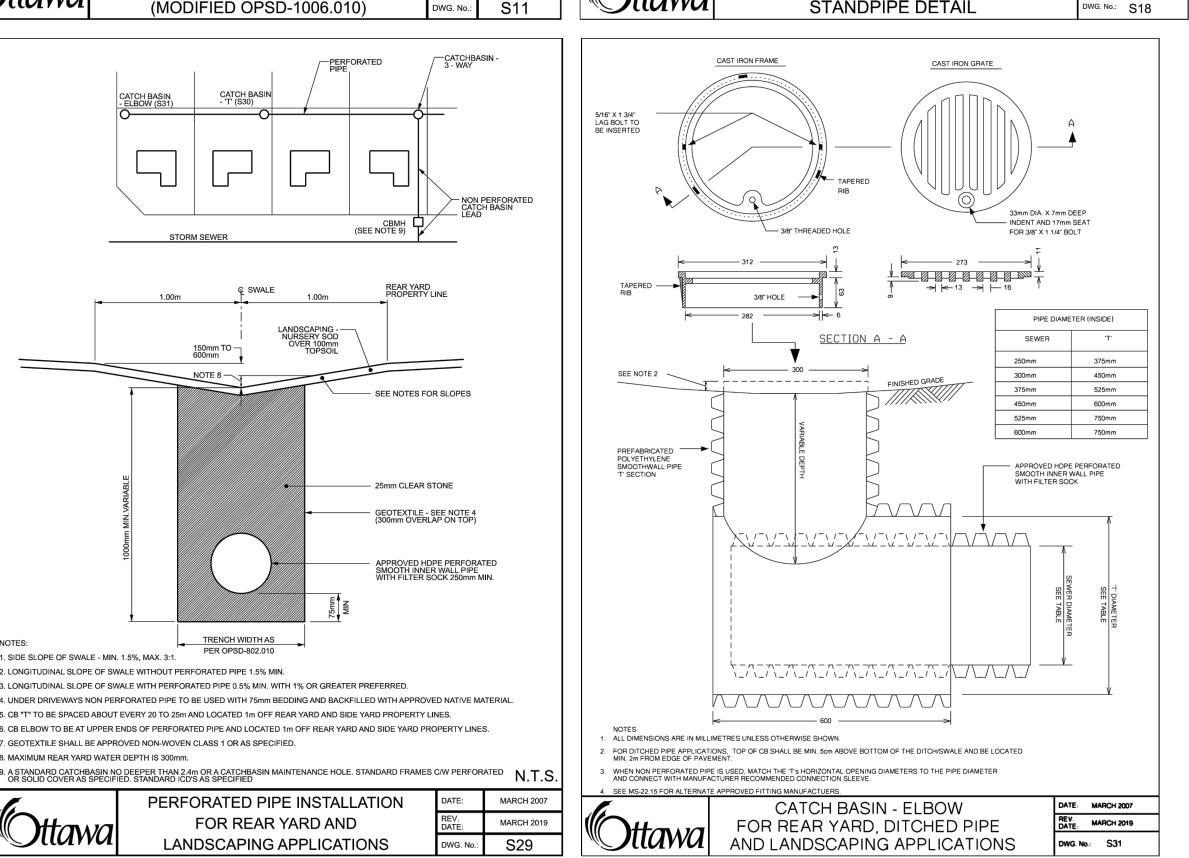
BEDDING AS SPECIFIED

NOTE: BEDDING TO BE 300mm IN PRESENCE OF BEDROCK **INSULATION DETAIL FOR SHALLOW** SEWERS & WATERMAIN

6. CB ELBOW TO BE AT UPPER ENDS OF PERFORATED PIPE AND LOCATED 1m OFF REAR YARD AND SIDE YARD PROPERTY LINES.



SEE NOTE 2



#### AREA DRAIN TABLE (PHASE 1) AD No. | T/G ELEVATION | INVERT REFER TO MECHANICAL FOR CONNECTION DETAILS 94.35

	LANDSCAPE DRAIN TABLE (PHAS						
	LD. No.	T/G ELEVATION	INVERT				
	2000	94.70	NE=93.20				
	2001	94.25	SW=93.66				
· 							

CATCHBASIN MANHOLE TABLE							
CBMH ID	STATION	SIZE (mm)	T/G ELEV (m)	INVERT (m)			
110	1+088.37	1200	94.60	NE=92.89			

	CATCHBASIN TABLE (PHASE 1)									
CB ID	STATION	SIZE (mm)	T/G ELEV (m)	INVERT (m)	ICD DIA (mm)	100yr CAPTURE RATE (L/s)				
01	1+047.58	610X1450	93.97	NE=92.77	152	0				
02	1+047.58	610X1450	93.97	SW=92.77	178	0				
03	1+095.34	610X610	94.87	NE=93.67	83	0				
04	1+095.34	610X610	94.87	SW=93.67	83	0				
05	1+140.19	610X610	96.30	NE=94.84	83	0				
06	1+140.19	610X610	96.30	SW=94.84	83	0				
07	1+169.95	610X610	97.67	NE=96.47	102	0				
08	1+169.95	610X610	97.67	SW=96.47	83	0				

STM MANHOLE TABLE (PHASE 1)						
MANHOLE ID	EID I STATION I SITE I I''		T/G ELEV (m)	INVERT (m)		
101	1+024.07	1500mmØ	94.06	NW=92.24 SE=92.23		
102	1+035.35	1800mmØ	94.08	NW=92.35 SE=92.27 SW=92.65 NE=92.65		
103	1+057.70	1500mmØ	94.06	NW=92.50 SE=92.42 SW=92.77		
104	1+087.85	1500mmØ	94.68	NW=92.73 SE=92.58 NE=92.88 SW=92.80		
105	1+145.49	1200mmØ	96.56	NW=93.96 SE=93.88 NE=94.02		
106	1+158.54	1200mmØ	97.17	NW=94.36 SE=94.35 NE=94.46		
107	1+175.54	1200mmØ	97.97	SE=94.88 NW=95.48		

	AREA	DRAIN TABLE (FUTURE)	S
AD No.	T/G ELEVATION	INVERT	MANH
1002	94.45		1017 (141
1003	94.60		4
1004	98.60		
1005	98.65		,
1006	98.75		4
1007	100.90		
1008	101.05		4
1009	101.00		
1010	101.00		4
1011	101.00		
1012	100.70		4
1013	100.50		
1014	100.45		4
1015	101.50		
1016	101.40	REFER TO MECHANICAL FOR CONNECTION DETAILS	4
1017	100.05	REFER TO MECHANICAL FOR CONNECTION DETAILS	
1018	99.60		4
1019	95.60		
1020	94.80		,
1021	94.90		
1022	94.75		4
1023	94.75		
1024	94.80		
1025	94.80		
1026	94.80		

MANHOLE ID	STATION	T/G ELEV	INVERT
400	2+001	95.10	NE=92.10 SE=92.59 NW=92.59
401	2+023.01	95.18	NE=92.17 SW=92.16
402	2+127.09	94.91	NE=92.46 SW=92.43
403	2+160.38	94.58	SW=92.54 NW=92.60
404	2+034.38	94.58	NW=92.65 SE=92.62 SW=92.68
406	2+062.66	94.65	N=92.80 S=92.75 W=92.81
408	2+111.35	95.78	N=92.99 S=92.98 W=93.04
409	2+194.23	96.34	S=93.28 W=93.34 N=93.30
410	2+204.56	96.53	S=93.34 NE=93.37
411	2+256.30	97.10	SW=93.55 SE=93.61 NE=93.53
412	1+121.05	95.75	SW=93.90 NE=93.90 NW=93.84
601	???	100.26	SE=94.62 NE=94.52 SW=94.52
602	???	101.91	SE=95.11 NE=95.01 SW=95.01
603	???	101.23	SE=95.27 NE=95.21 SW=95.21

LANDSCAPE DRAIN TABLE (FUTURE)						
LD. No.	T/G ELEVATION	INVERT				
2002	94.60	NW=93.60				
2003	94.90	NW=93.80				

1027 94.80

1028 94.55

1031 100.80

94.50

1030

CATCHBASIN TABLE (FUTURE)										
CB ID	STATION	SIZE (mm)	T/G ELEV (m)	INVERT (m)	ICD DIA (mm)	100yr CAPTURE RATE (L/s)				
09	1+214.07	610X610	99.76	NE=98.56	83	0				
10	1+214.07	610X610	99.76	SW=98.56	83	0				
11	1+258.85	610X610	101.37	NE=100.17	83	0				
12	1+258.85	610X610	101.37	SW=100.17	83	0				
13	2+046	610X1450	94.44	E=93.24	152	0				
14	2+046	610X1450	94.44	W=93.24	83	0				
15	2+100.40	610X610	95.42	E=94.22	83	0				
16	2+100.40	610X610	95.42	W=94.22	83	0				
17	2+153.37	610X610	95.72	E=94.50	83	0				
18	2+153.37	610X610	95.70	W=94.50	83	0				
19	2+223.86	610X610	96.80	SE=95.60	83	0				
20	2+223.92	610X610	96.80	NW=95.60	83	0				
21	2+220.56	610X610	96.60	SE=95.35	127	0				

STM MANHOLE TABLE (FUTURE)								
MANHOLE ID	STATION	SIZE (mm)	T/G ELEV (m)	INVERT (m)				
108	1+188.58	1200mmØ	98.59	NW=96.29 SE=95.89				
109	1+266.27	1200mmØ	101.56	SE=98.63				
300	2+005.89	1800mmØ	94.57	NW=92.57 SW=92.42 NE=92.42				
301	2+027.42	1800mmØ	94.56	NW=92.70 SE=92.62 SW=93.16				
302	2+031.58	1800mmØ	94.55	NW=92.73 SE=92.70 SW=93.18				
304	2+055.11	1800mmØ	94.52	N=92.88 S=92.80 W=93.31 E=93.23				
305	2+061.15	1800mmØ	94.58	N=92.96 S=92.89 W=93.34				
306	2+084.10	1500mmØ	95.06	N=93.02 S=93.01 W=93.44 E=93.29				
307	2+109.80	1500mmØ	95.70	N=93.15 S=93.07 W=93.52				
308	2+170.67	1200mmØ	95.87	N=93.40 S=93.33 W=93.74				
309	2+192.78	1200mmØ	96.27	S=93.74 W=93.82 N=93.82				
310	2+204.04	1200mmØ	96.50	NE=94.12 S=94.03				
311	2+243.09	1200mmØ	97.19	SW=94.89				
501	???	1200mmØ	100.33	SE=97.65 NE=97.58 SW=97.58				
502	???	1200mmØ	99.55	NE=97.72 SW=97.72 SE=97.82				
503	???	1200mmØ	101.31	SE=99.40 NE=98.99				
504	???	1200mmØ	101.21	SE=99.52 SW=97.93 NE=97.93				

PARKING LEVEL 1 = 90.35m	STORMWATER STORAGE TANK VENTED BY TANK ACCESS LID. LID IS PER CITY OF OTTAWA DETAIL \$28.1, FRAME PER CITY DETAIL \$25. T/c6=43.0  PROPOSED BENCH  CURB AS PER SC1.1  PROPOSED BENCH  CONCRETE SIDEWALK  150mm EMERGENCY OVERFLOW PIPE INV = 93.33  INSULATION REFER TO DETAIL  100-YEAR WATER ELEVATION = 92.75m  STORMWATER STORAGE TANK (DESIGNED BY STRUCTURAL ENGINEER) MAX VOLUME = 161.05m <sup>3</sup> REQUIRED VOLUME = 116.55m <sup>3</sup> PYEAR WATER ELEVATION = 91.34m  2-YEAR WATER ELEVATION = 91.34m  2-YEAR WATER ELEVATION = 91.34m  2-YEAR WATER ELEVATION = 90.99m  STORMWATER STORAGE TANK (DESIGNED BY STRUCTURAL ENGINEER) MAX VOLUME = 116.55m <sup>3</sup> BACKWATER VALVE AND STANDPIPE PER CITY OF OTTAWA DETAIL \$18.80  STORMWATER STORAGE TANK (DESIGNED BY STRUCTURAL ENGINEER) MAX VOLUME = 161.05m <sup>3</sup> REQUIRED VOLUME = 116.55m <sup>3</sup> BACKWATER VALVE AND STANDPIPE PER CITY OF OTTAWA DETAIL \$18.80	STMMH 102 T/G=94.08
7		
PARKING LEVEL 2 = 87.50m	MECHANICAL FOR DETAILS  0.50m DEEP SUMP	

**PHASE 1 CISTERN** 

REVISION

N.T.S.

DATE: MAY 2001

. MARCH 2016

#### THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

**CLARIDGE HOMES** 

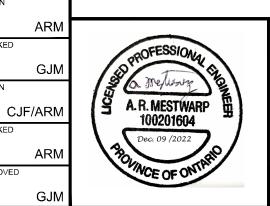
CLARIDGE HOMES 505 PRESTON STREET. 2ND FLOOR OTTAWA , ONTARIO K1S 4N7



NOT FOR CONSTRUCTION

			SCALE
REVISED AND ISSUED FOR CITY APPROVAL	DEC 09/2022	GJM	

DATE BY







www.novatech-eng.com

1500 MERIVALE 1500 MERIVALE, CITY OF OTTAWA

> DRAWING NAME NOTES AND DETAILS GENERAL SERVICING

REV #1

121009-NDGP CITY PLAN No. 18612

### **GENERAL NOTES:**

- 1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- 2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS
- 3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- 4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$2,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
- 5. RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF MUNICIPAL AUTHORITIES.
- 6. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- 7. ALL ELEVATIONS ARE GEODETIC. THE SITE BENCHMARKS ARE THE FIRE HYDRANT TOP OF SPINDLE . BM NO.1 IS LOCATED APPROXIMATELY 105m FROM MERIVALE RD AND CLYDE AVE INTERSECTION, LOCATED ON THE EAST SIDE OF CLYDE AVE. BM NO.2 IS LOCATED AT THE EAST SIDE OF CLYDE AVE AND APPROXIMATELY 155m FROM BASELINE ROAD AND CLYDE AVE INTERSECTION.(BM NO. 1 ELEV = 95.96, BM NO. 2 ELEV = 96.25). REFER TO ANNIS, O'SULLIVAN, VOLLEBEKK LTD. TOPOGRAPHICAL PLAN OF SURVEY PART OF LOTS 18 AND 19, 20 AND 21 REGISTERED PLAN 30 CITY OF OTTAWA
- 8. REFER TO GEOTECHNICAL INVESTIGATION REPORT PATERSON GROUP, REPORT PG5561-1, DATED FEBRUARY 23, 2021 FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE
- 9. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND
- 10. REFER TO THE STORMWATER MANAGEMENT REPORT No. \*\*\*, DATED \*\*\*\* PREPARED BY NOVATECH.
- 11. SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10 AND R25).

#### GRADING NOTES:

DIMENSIONS.

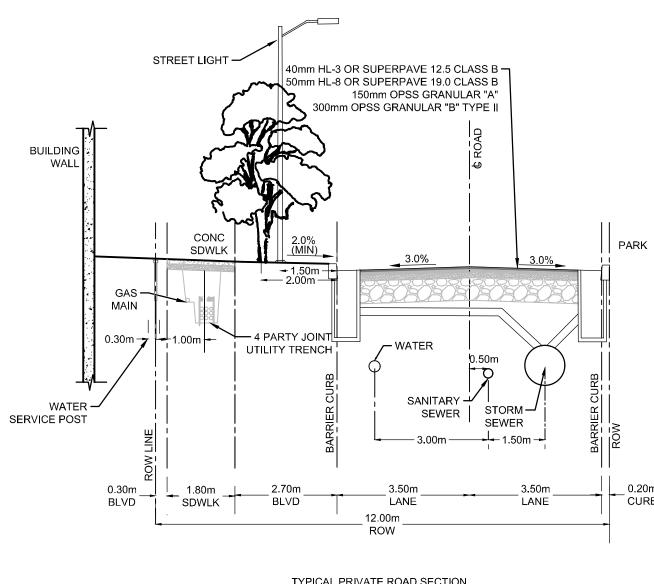
- 1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED BUILDING AND PAVED AREAS.
- 2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER . IF SOFT SPOTS DEVELOP IN THE SUBGRADE DURING COMPACTION OR DUE TO CONSTRUCTION TRAFFIC, THE AFFECTED AREAS SHOULD BE EXCAVATED AND REPLACED WITH OPSS GRANULAR B TYPE II MATERIAL. THE PAVEMENT GRANULAR BASE AND SUBBASE SHOULD BE PLACED IN MAXIMUM 300 mm THICK LIFTS AND COMPACTED TO A MINIMUM OF 98% OF THE MATERIAL'S SPMDD USING SUITABLE VIBRATORY EQUIPMENT.
- 3. NON-SPECIFIED EXISTING FILL, ALONG WITH SITE-EXCAVATED SOIL, CAN BE USED AS GENERAL LANDSCAPING FILL WHERE SETTLEMENT OF THE GROUND SURFACE IS OF MINOR CONCERN. THIS MATERIAL SHOULD BE SPREAD IN THIN LIFTS AND AT LEAST COMPACTED BY THE TRACKS OF THE SPREADING EQUIPMENT TO MINIMIZE VOIDS. IF THIS MATERIAL IS TO BE USED TO BUILD UP THE SUBGRADE LEVEL FOR AREAS TO BE PAVED, IT SHOULD BE COMPACTED IN THIN LIFTS TO AT LEAST 95% OF THE MATERIAL'S SPMDD.
- 3. THE PAVEMENT GRANULAR BASE AND SUBBASE SHOULD BE PLACED IN MAXIMUM 300mm THICK LIFTS AND COMPACTED TO A MINIMUM OF 98% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
- 4. ALL CURBS AND SIDEWALKS TO BE BUILT AS PER CITY OF OTTAWA DETAIL DRAWINGS SC1.4 AND SC4.
- 5. GRADE AND/OR FILL BEHIND PROPOSED CURB AND BETWEEN BUILDINGS AND CURBS, WHERE REQUIRED TO PROVIDE POSITIVE DRAINAGE.

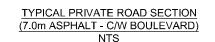
### 6. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.

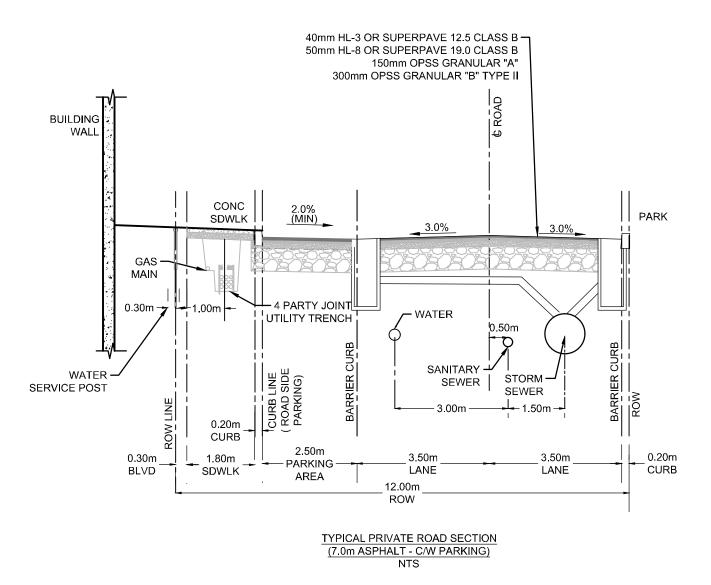
- 7. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
- 8. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
- 9. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING THE AS-BUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.

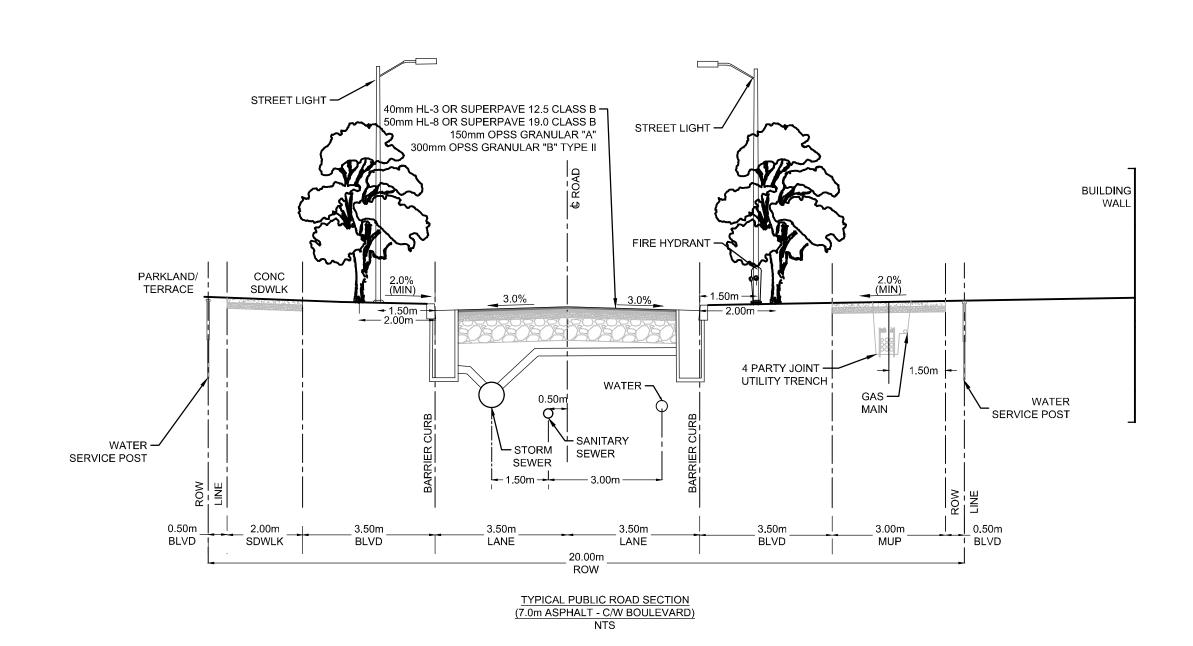
## **EROSION AND SEDIMENT CONTROL NOTES:**

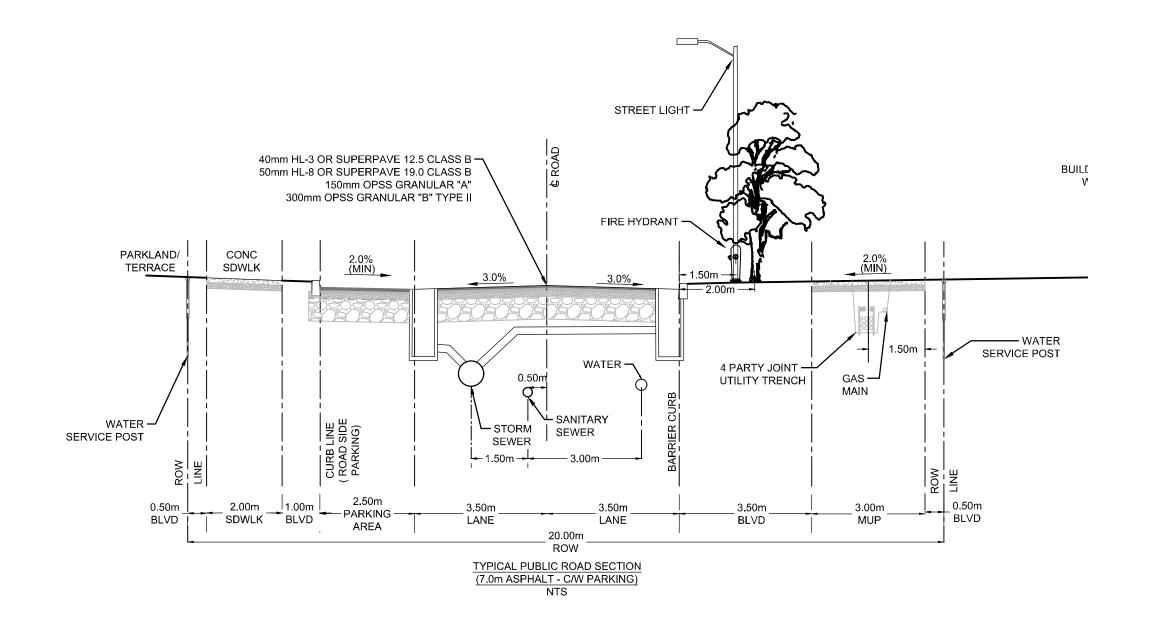
- 1. THE OWNER AGREES TO PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA, APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING REMOVAL OF VEGETATION FTC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL SUCH AS BUT NOT LIMITED TO INSTALLING FILTER CLOTHS ACROSS MANHOLE/CATCHBASIN LIDS TO PREVENT SEDIMENTS FROM ENTERING STRUCTURES AND INSTALL AND MAINTAIN A LIGHT DUTY SILT FENCE BARRIER AS REQUIRED.
- 2. THE CONTRACTOR SHALL PLACE FILTER CLOTH UNDER THE CATCHBASIN AND MANHOLE GRATES FOR THE DURATION OF CONSTRUCTION AND WILL REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION.
- 3. SILT FENCING FOR ENTIRE PERIMETER OF SITE, SHALL BE UTILIZED TO CONTROL EROSION FROM THE SITE DURING
- 4. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

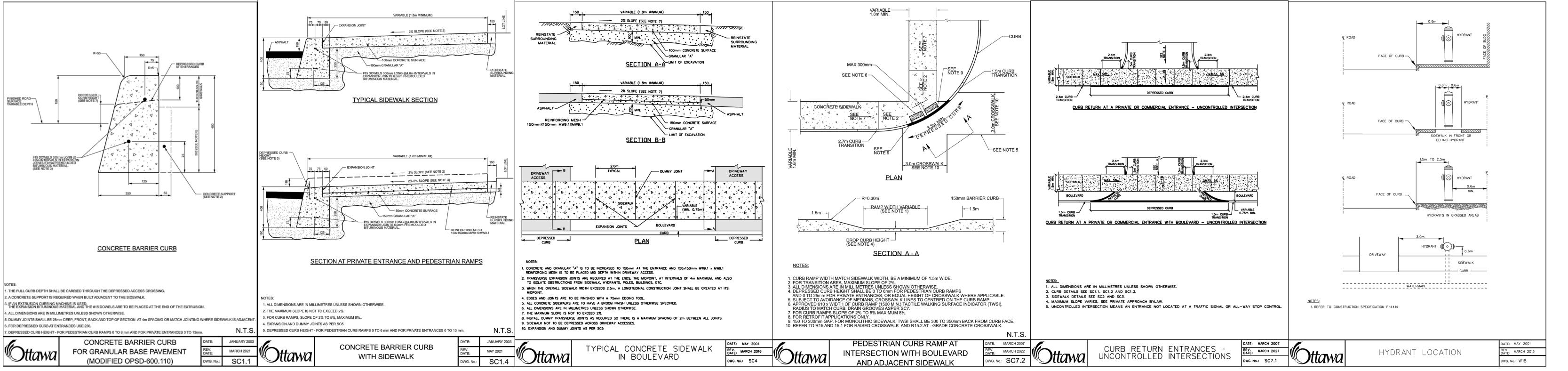












THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR

DAMAGE TO THEM.

# **CLARIDGE HOMES**

CLARIDGE HOMES 505 PRESTON STREET, 2ND FLOOR OTTAWA , ONTARIO CLARIDGE H·O·M·E·S K1S 4N7



2	REVISED AND ISSUED FOR CITY APPROVAL	DEC 09/2022	GJM	

REVISION

DATE

A.R. MESTWARP

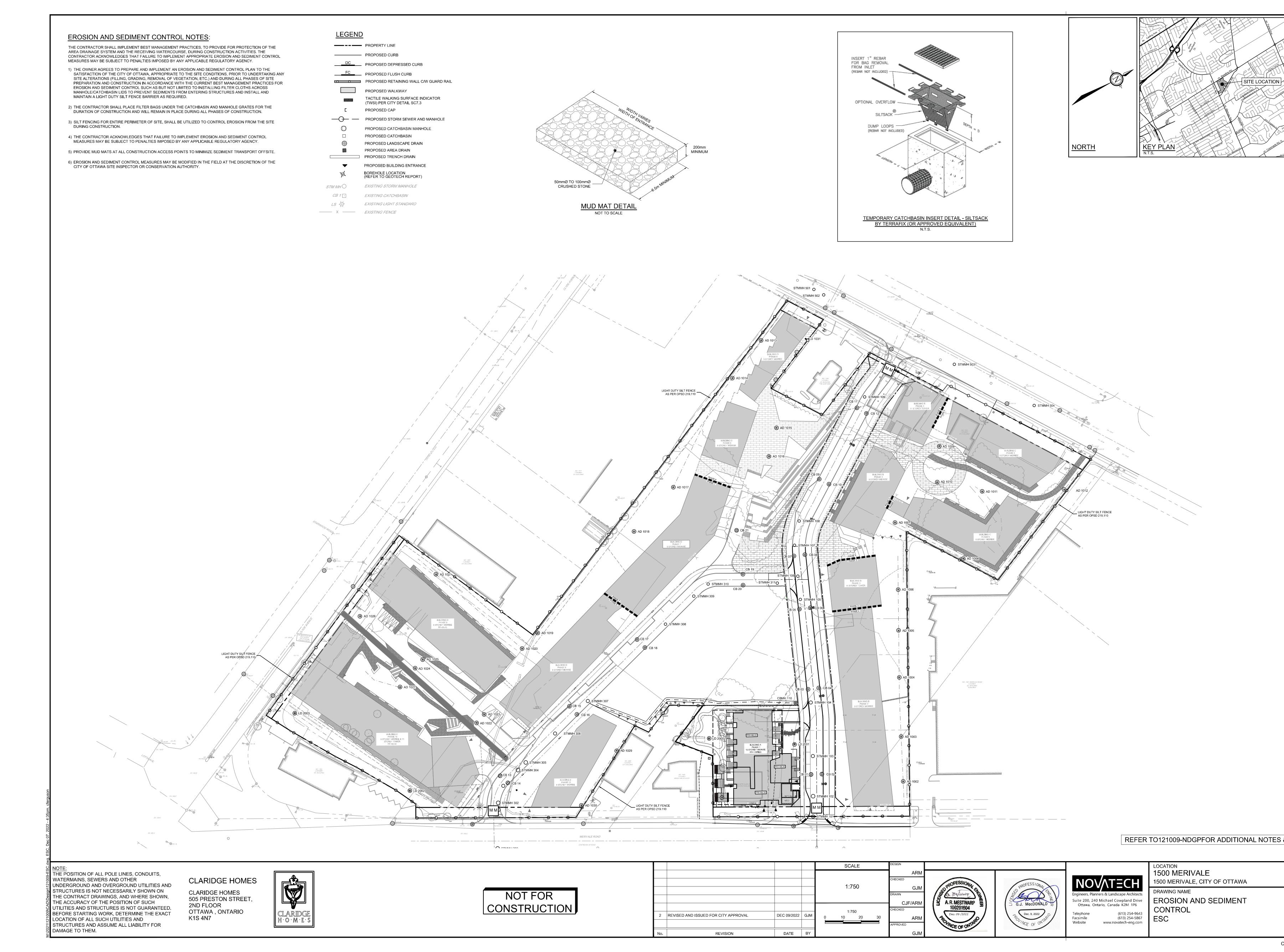
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1500 MERIVALE 1500 MERIVALE, CITY OF OTTAWA

DRAWING NAME NOTES AND DETAILS **GRADING** (613) 254-9643 REV #1

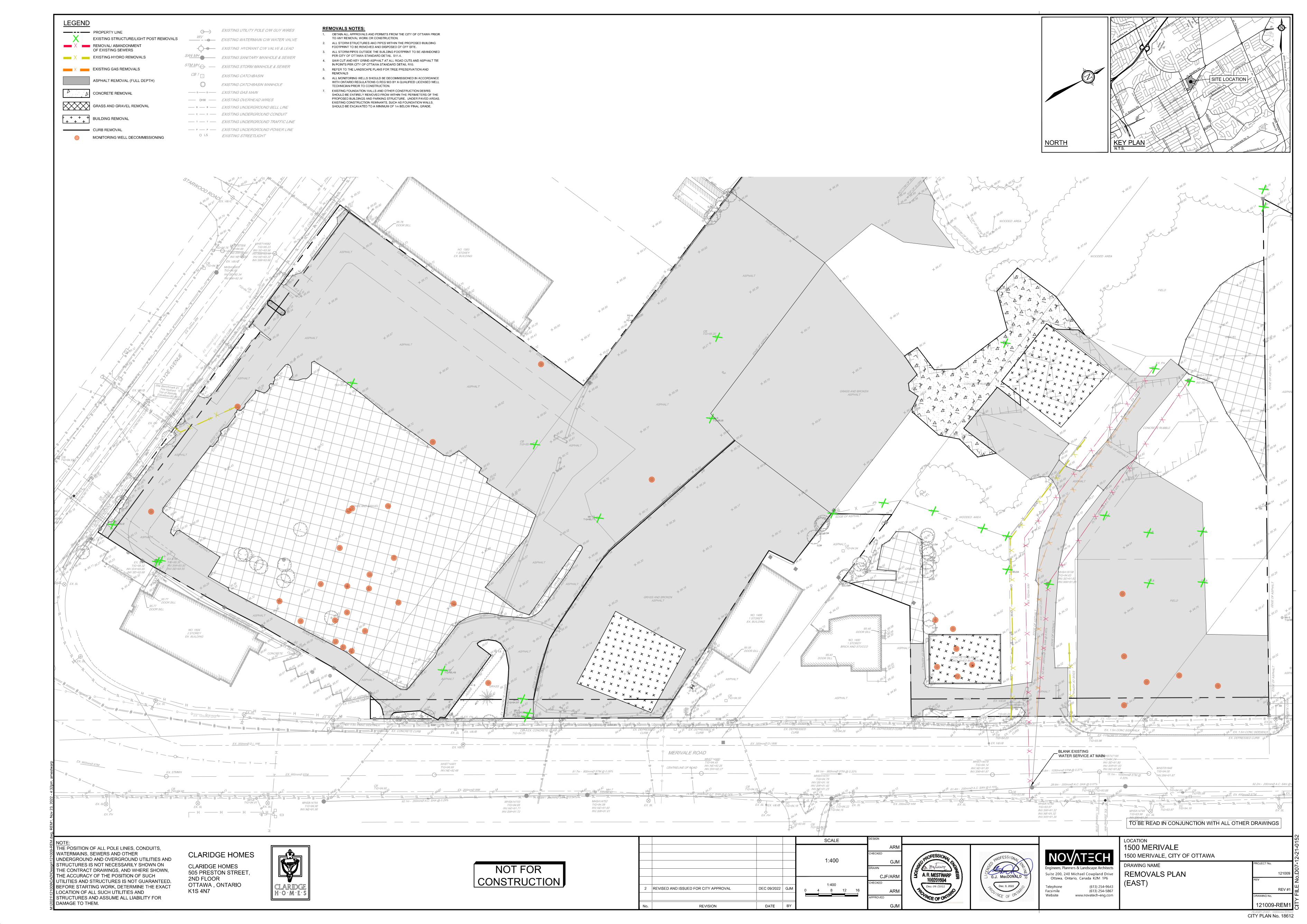
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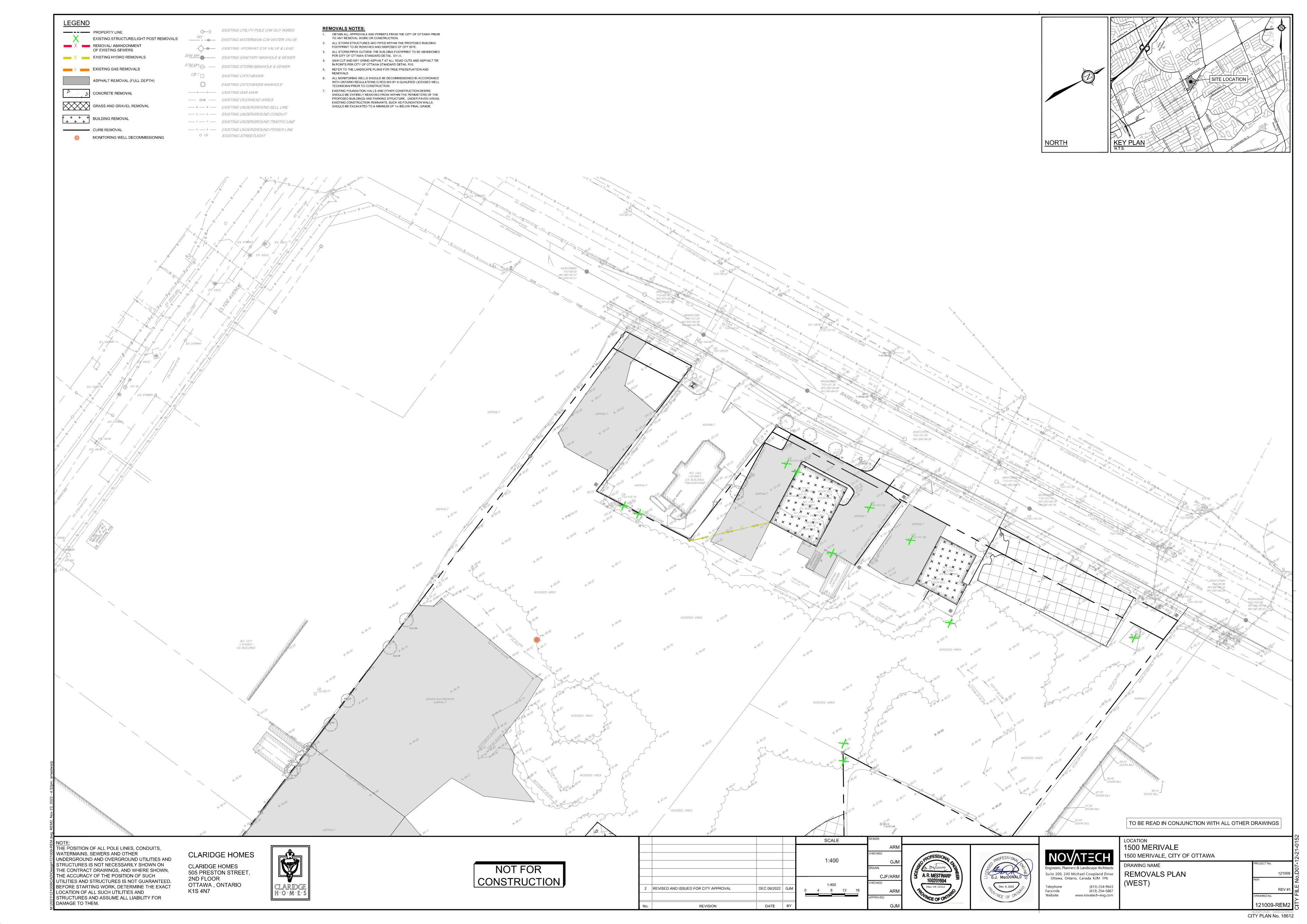


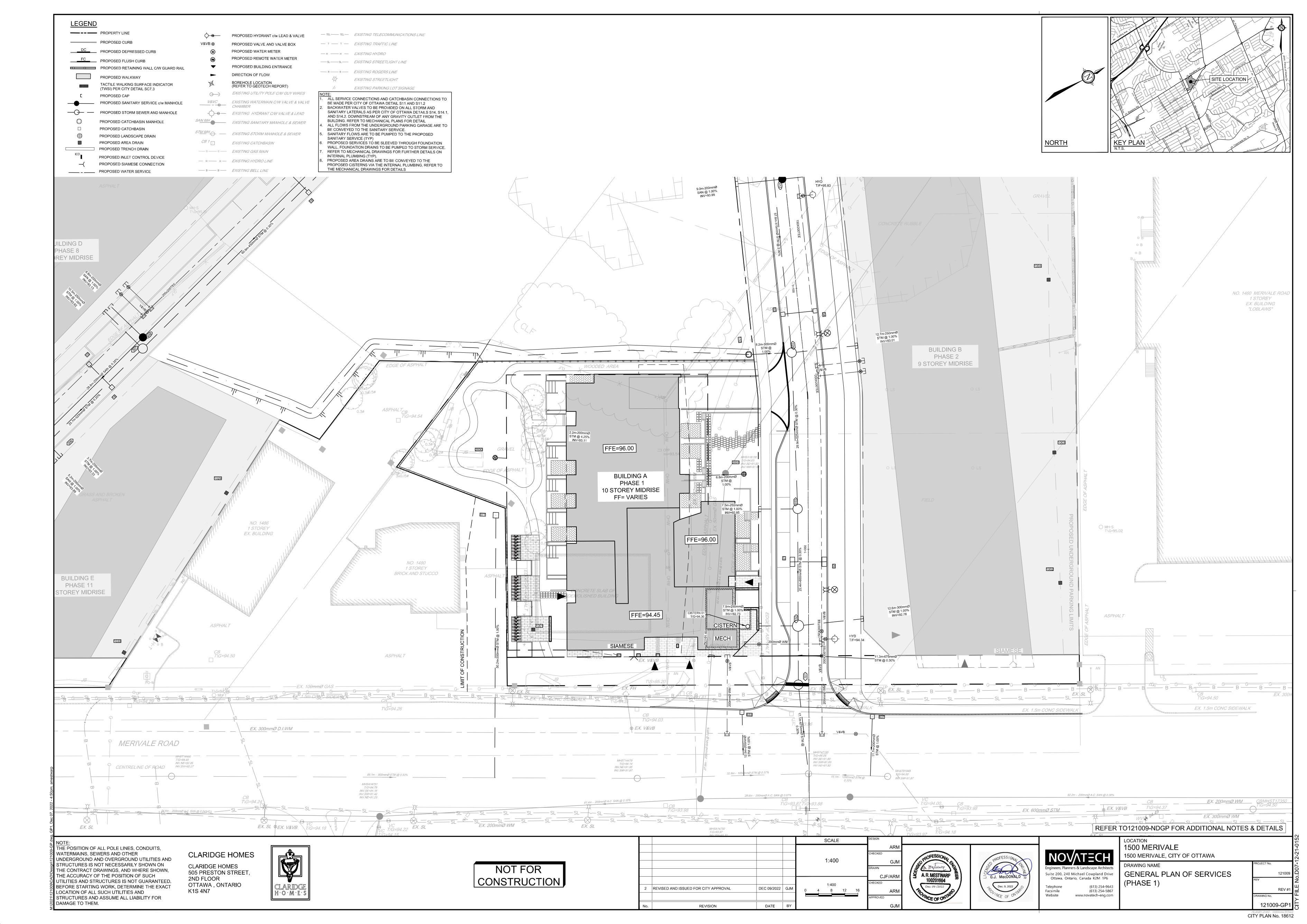
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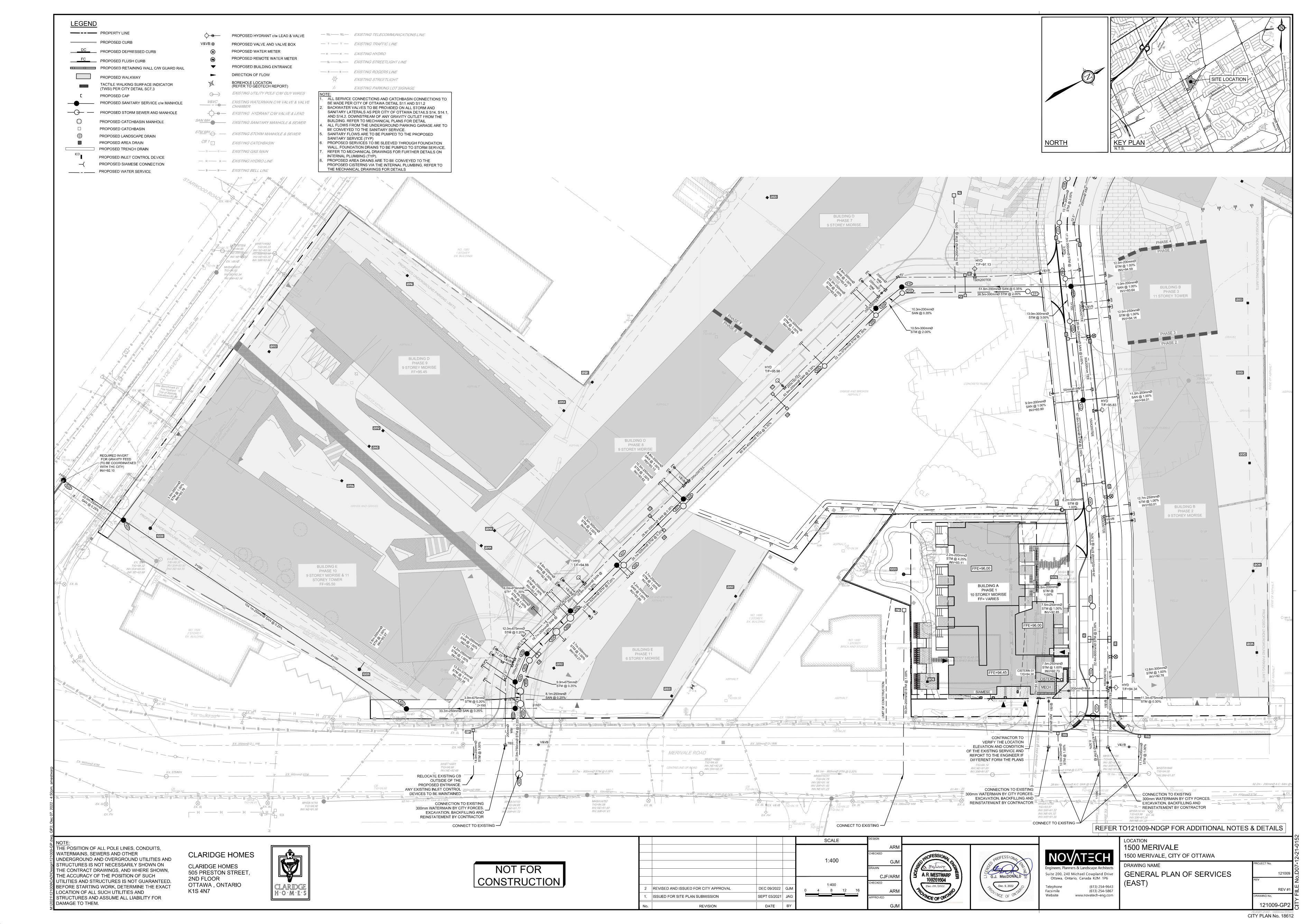
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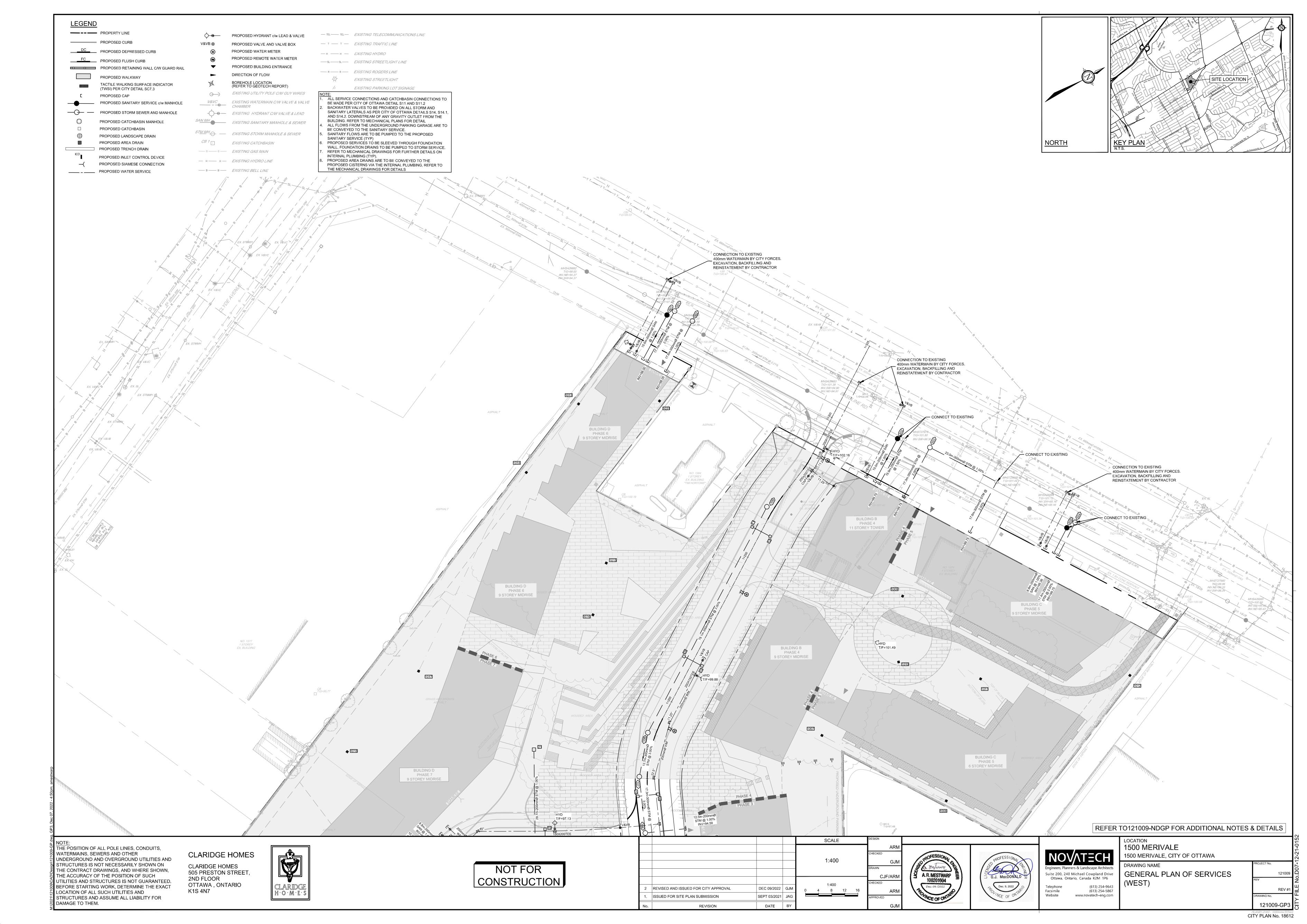
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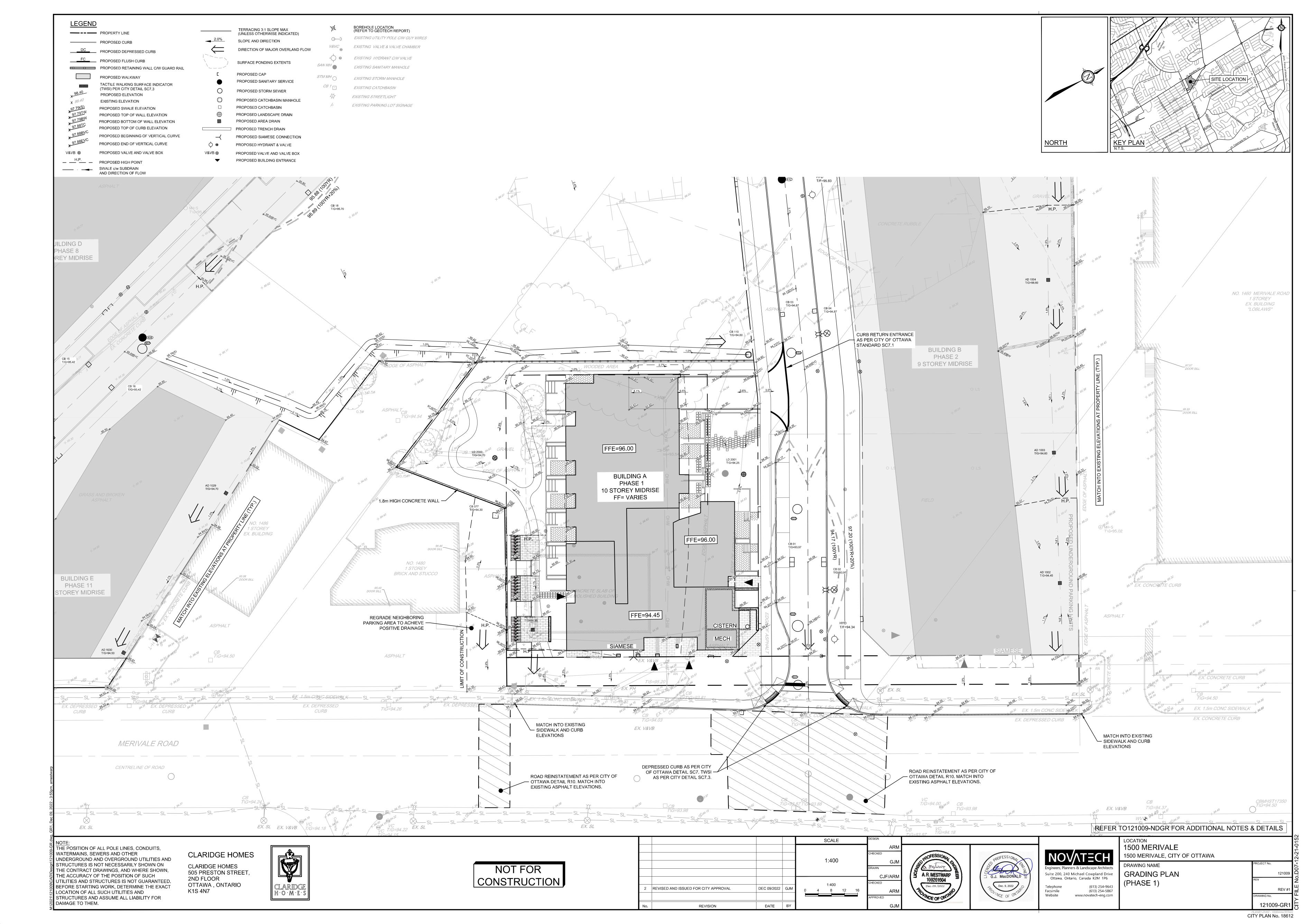


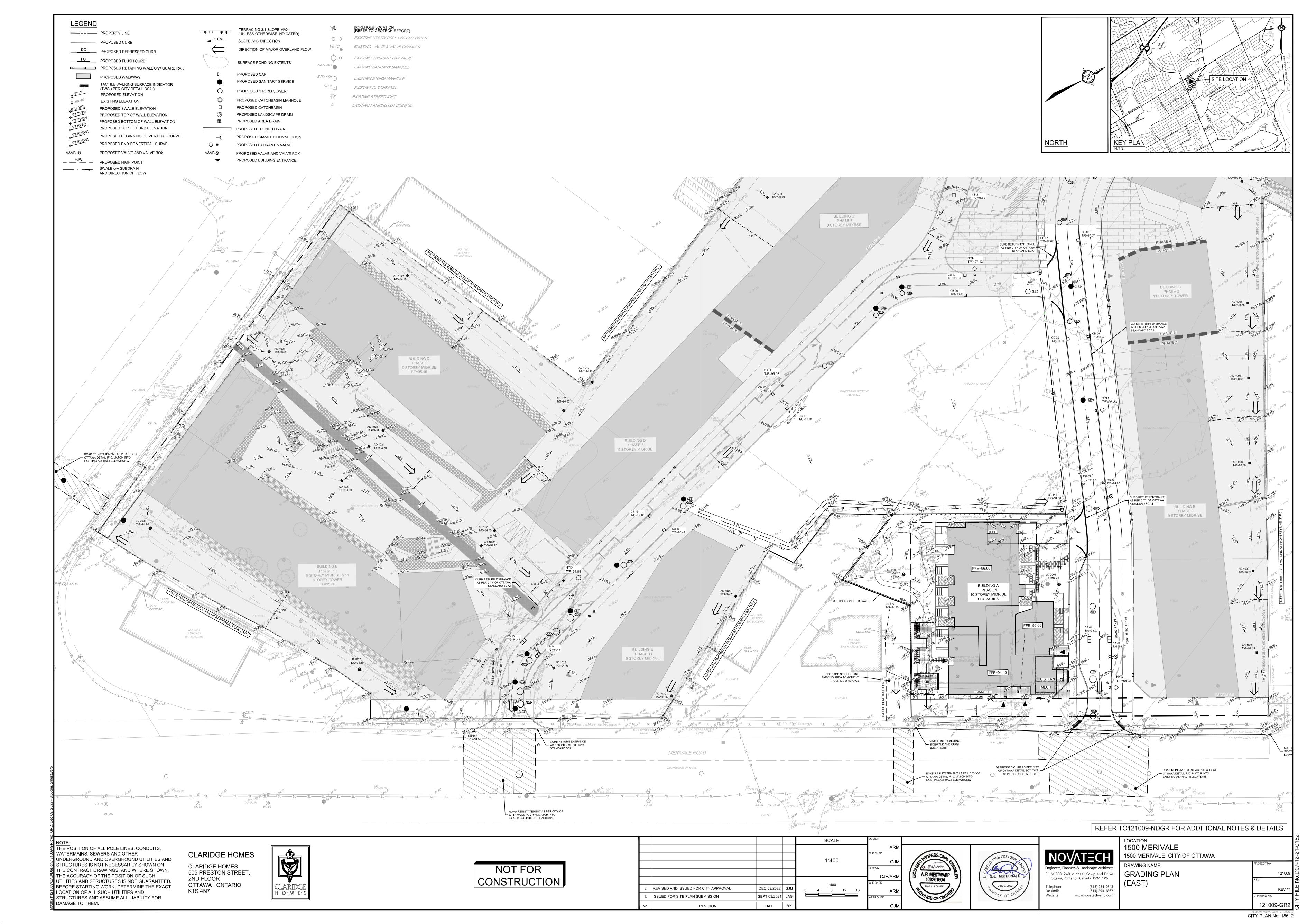


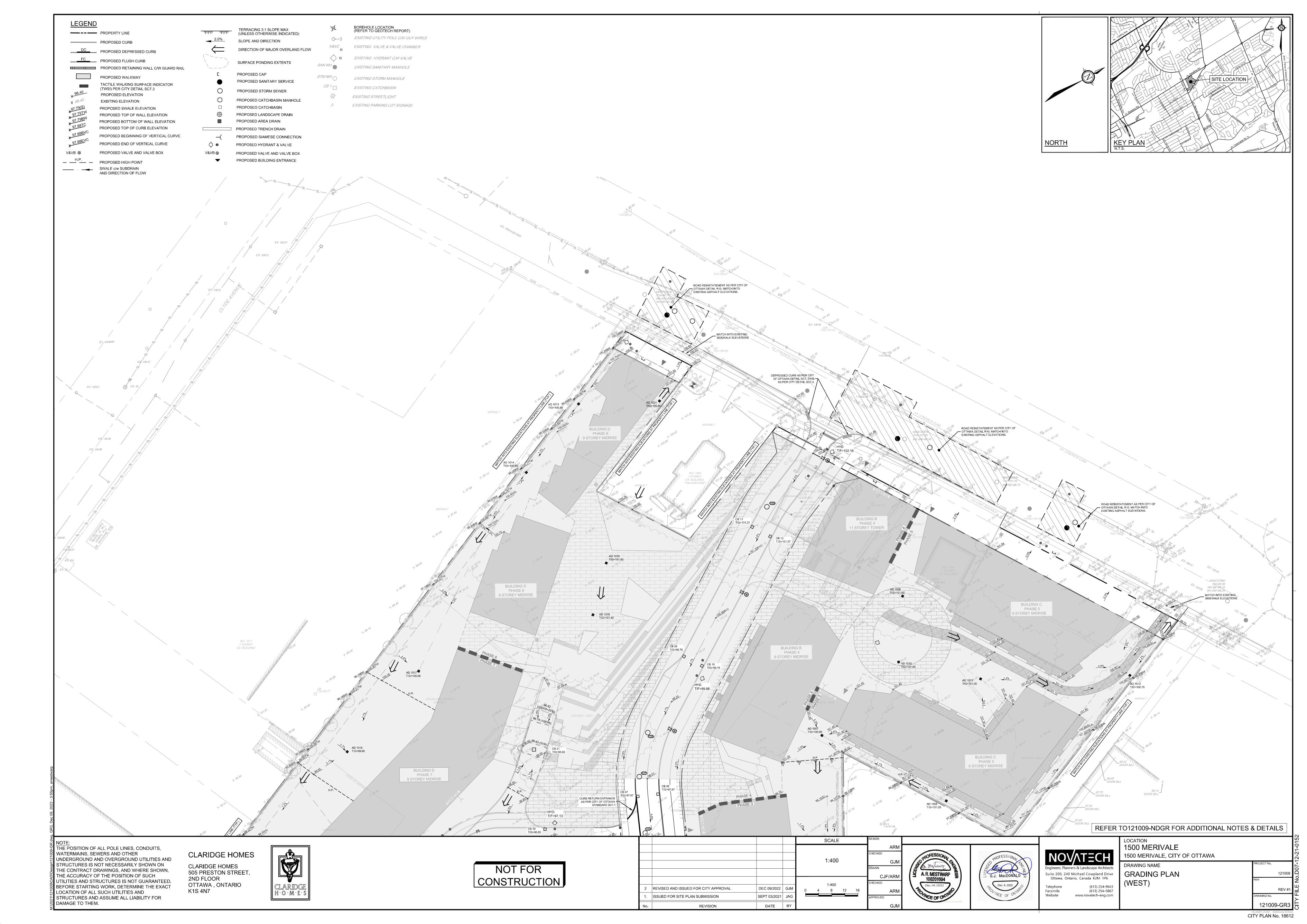


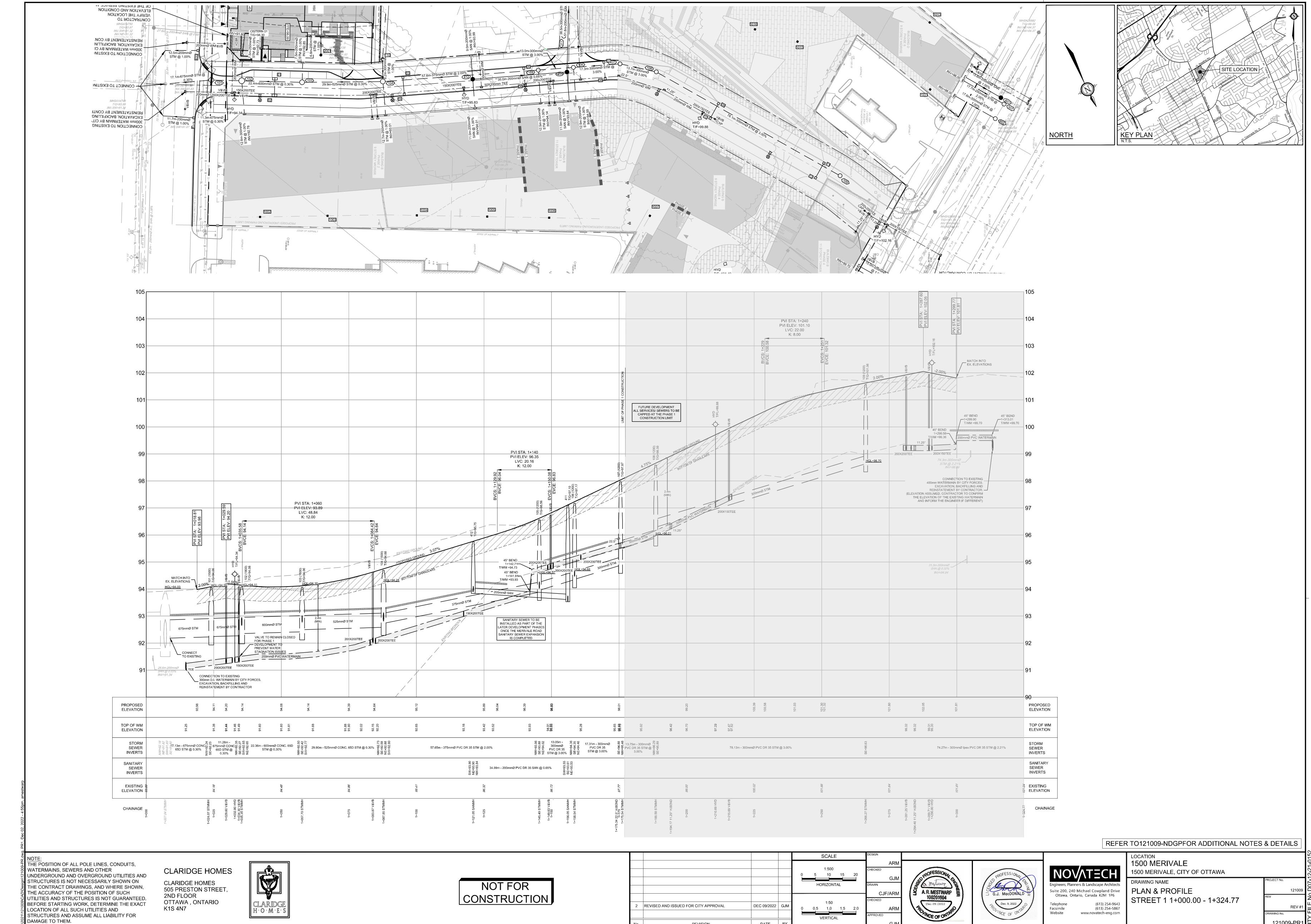








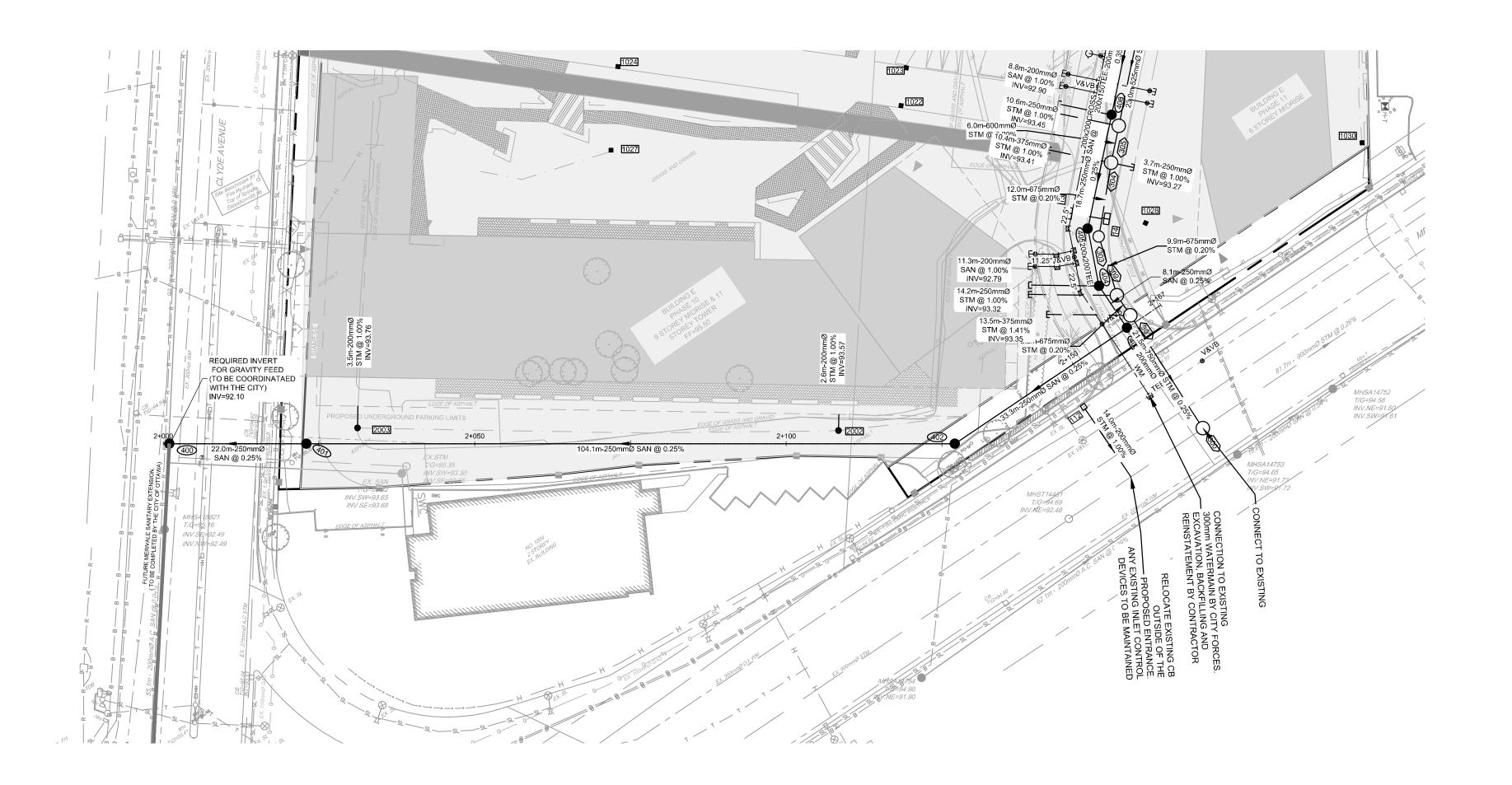


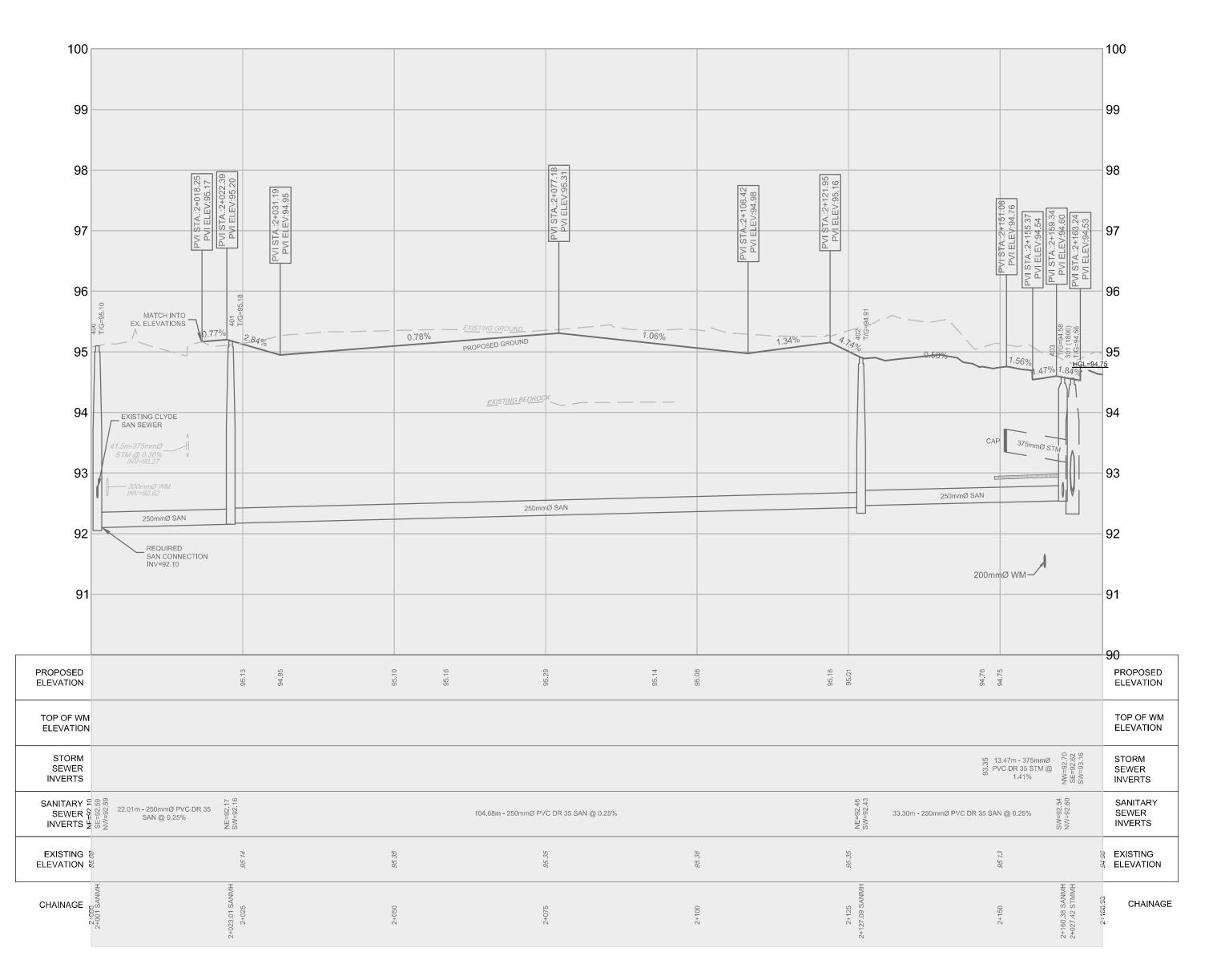


DATE BY

REVISION

121009-PR1 CITY PLAN No. 18612





REFER TO121009-NDGPFOR ADDITIONAL NOTES & DETAILS

SITE LOCATION

NOTE:
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CLARIDGE H·O·M·E·S

CLARIDGE HOMES

CLARIDGE HOMES 505 PRESTON STREET,

OTTAWA , ONTARIO

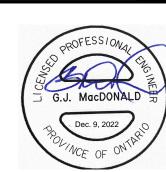
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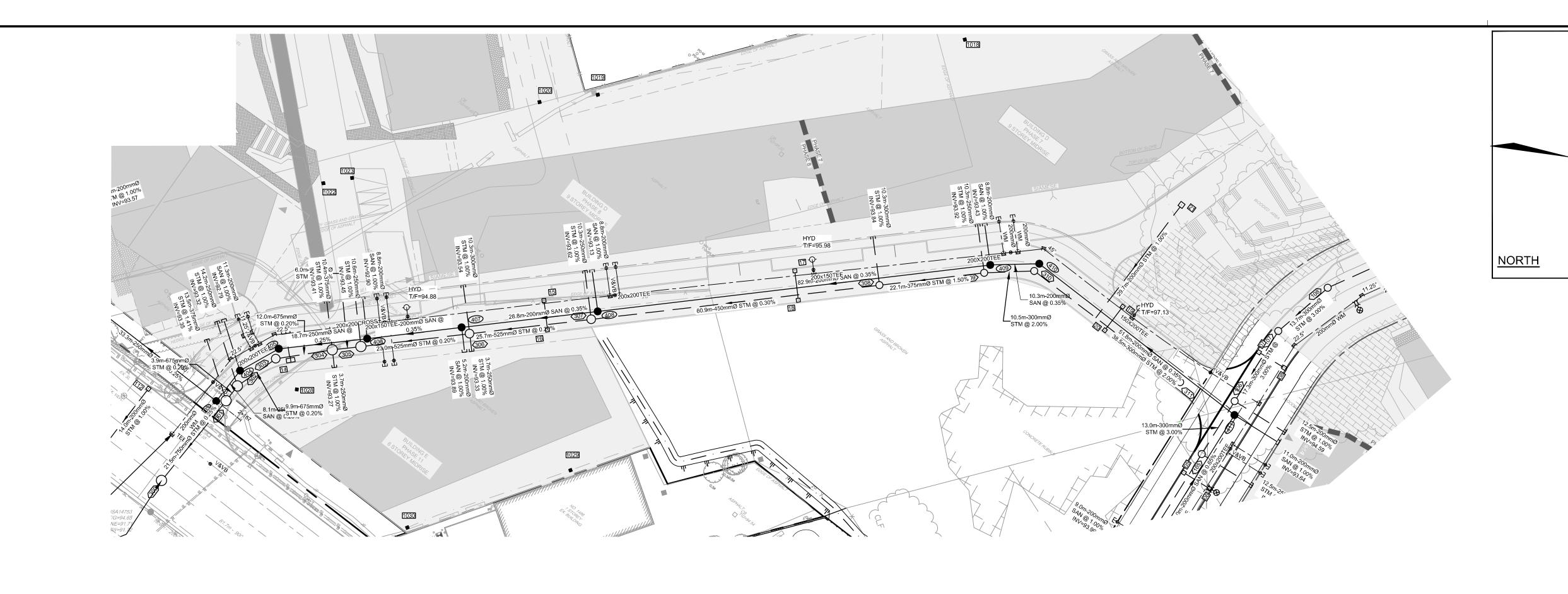
LOCATION 1500 MERIVALE 1500 MERIVALE, CITY OF OTTAWA

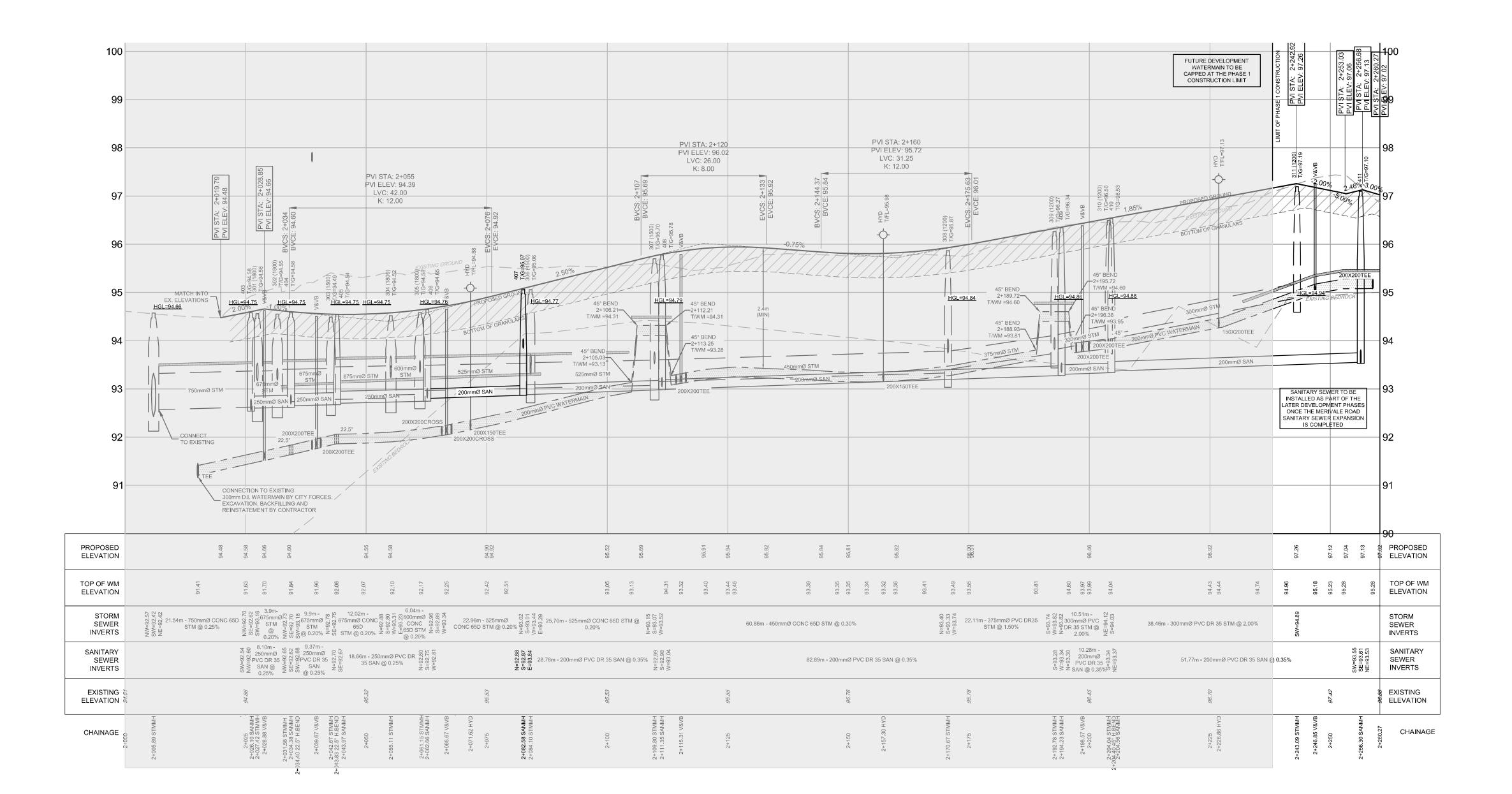
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REV #1 121009-PR2

CITY PLAN No. 18612

121009





REFER TO121009-NDGPFOR ADDITIONAL NOTES & DETAILS

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CLARIDGE HOMES CLARIDGE H·O·M·E·S

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OTTAWA , ONTARIO

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Engineers, Plan	ners & Landscape Architects
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Facsimile	(613) 254-5867
Website	www.novatech-eng.com

1500 MERIVALE 1500 MERIVALE, CITY OF OTTAWA

DRAWING NAME PLAN & PROFILE PRIVATE ROAD 2+000.00 - 2+260.27

CITY PLAN No. 18612