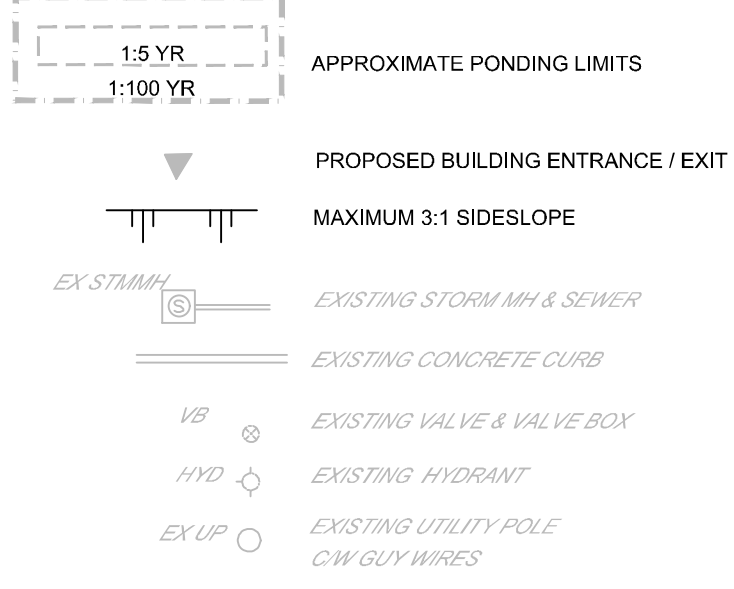


**LEGEND**

- PROPERTY LINE
- PROPOSED BARRIER CURB
- DC PROPOSED DEPRESSED CURB
- DRAINAGE AREA LIMITS
- A-2 POST-DEVELOPMENT AREA ID
- 0.729 POST-DEVELOPMENT DRAINAGE AREA (ha)
- 0.61 1.5 YEAR WEIGHTED RUNOFF COEFFICIENT
- STMH 108 PROPOSED STORM MANHOLE
- CBM 104 PROPOSED CATCHBASIN MANHOLE
- CB 01 PROPOSED CATCHBASIN
- RD ○ CONTROLLED FLOW ROOF DRAIN
- PROPOSED STORM SEWER AND FLOW DIRECTION
- ICD PROPOSED INLET CONTROL DEVICE
- PROPOSED TVSI
- EMERGENCY OVERLAND FLOW ROUTE
- BFE PROPOSED BASEMENT FLOOR ELEVATION
- T/F PROPOSED TOP OF FOUNDATION ELEVATION
- FFE FINISHED FLOOR ELEVATION
- USF UNDERSIDE OF FOOTING ELEVATION
- PROPOSED RETAINING WALL



**SITE FLOWS & STORMWATER MANAGEMENT TABLE**

DESIGN EVENT	PRE-DEVELOPMENT CONDITIONS			POST-DEVELOPMENT CONDITIONS						REDUCTION IN FLOW (L/s or %)
	UNCONTROLLED FLOW (L/s)	ALLOWABLE RELEASE RATE (L/s)**	A-1 DIRECT RUNOFF (L/s)	A-2 FLOW (L/s)	A-3 FLOW (L/s)	R-1 FLOW (L/s)	R-2 FLOW (L/s)	R-3 FLOW (L/s)	TOTAL FLOW (L/s)	
1:2 YR	63.3	63.3	26.5	13.5	3.7	2.9	2.9	3.5	52.9	10.4 or 16%
1:5 YR	85.9	85.9	35.9	16.8	5.0	3.3	3.3	4.0	68.2	17.7 or 21%
1:100 YR	194.0	194.0	71.9	23.3	9.4	3.6	3.6	4.5	117.3	66.7 or 34%

\*\* REDUCED FLOW COMPARED TO PRE-DEVELOPMENT UNCONTROLLED CONDITIONS  
\*\* LESSER OF UNCONTROLLED PRE-DEVELOPMENT FLOWS OR 85 L/s/ha

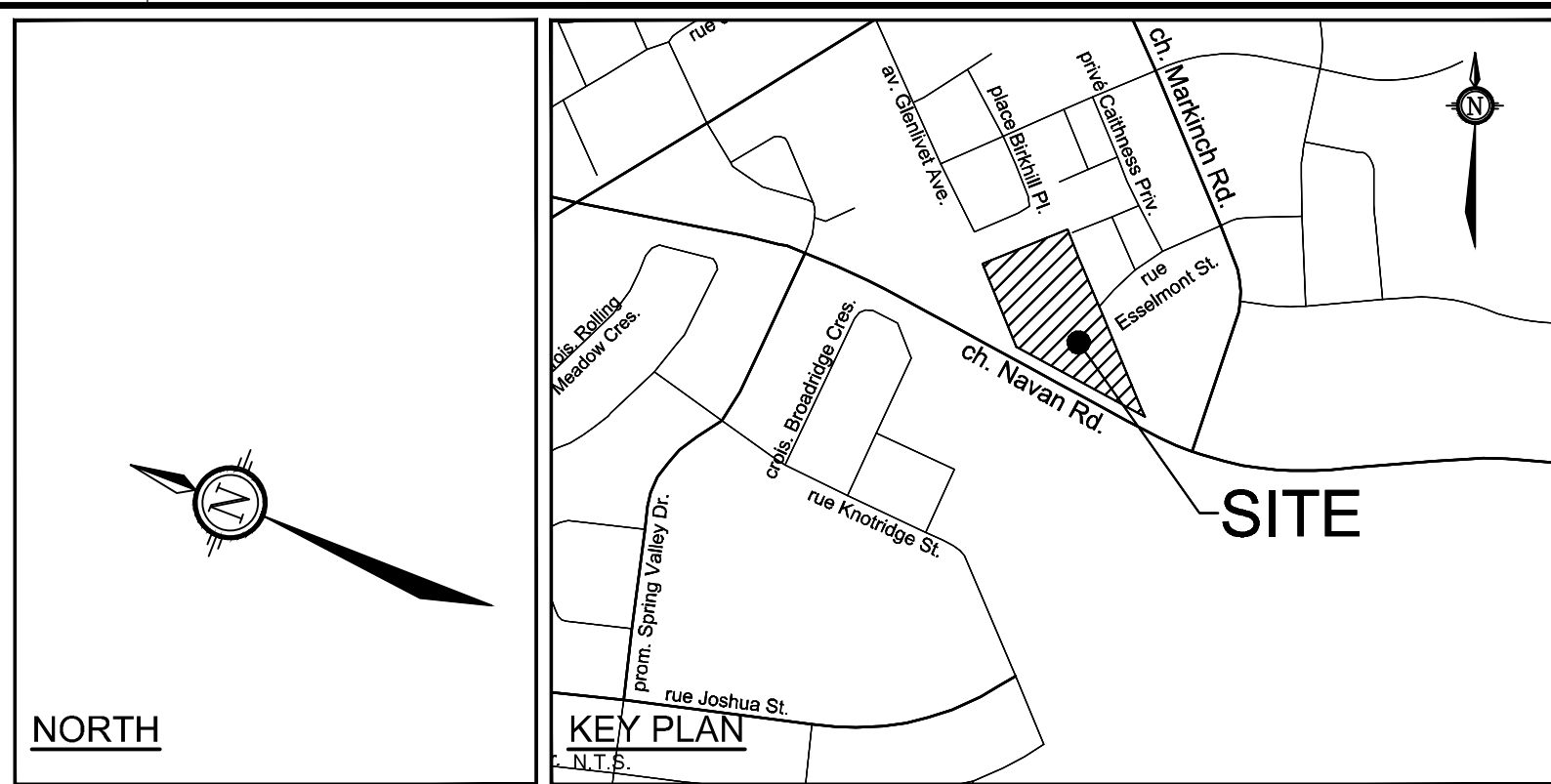
**AREA A-2: ICD TABLE - CBM 104**

DESIGN EVENT	TYPE OF ICD	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER DEPTH (m)	VOLUME (m³)
1:2 YR	118mm DIA. ORIFICE PLUG TYPE ICD	375	13.5	0.20	84.82	84.8
1:5 YR			16.8	0.31	84.93	116.4
1:100 YR			24.3	0.65	85.27	242.9

**ROOF DRAIN TABLE**

AREA ID	ROOF DRAIN No. (WATTS MODEL)	ROOF DRAIN OPENING SETTING	2 YEAR RELEASE RATE	APPROX. 2-YR PONDING DEPTH	5-YEAR RELEASE RATE	APPROX. 5-YEAR PONDING DEPTH	100-YEAR RELEASE RATE	APPROX. 100-YR PONDING DEPTH
R-1	RD 1A (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 2A (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 3A (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 4A (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
R-2	RD 1B (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 2B (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 3B (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 4B (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
R-3	RD 1C (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 2C (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 3C (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm
	RD 4C (RD-100-A-ADJ)	1/4 EXPOSED	0.72 L/s	10 cm	0.82 L/s	11 cm	0.91 L/s	14 cm

\* REFER TO THE DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT (R-2023-024) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.  
\*\* ALL CONTROLLED FLOW ROOF DRAINS TO BE WATTS 'ADJUSTABLE ACCUTROL' ROOF DRAINS.

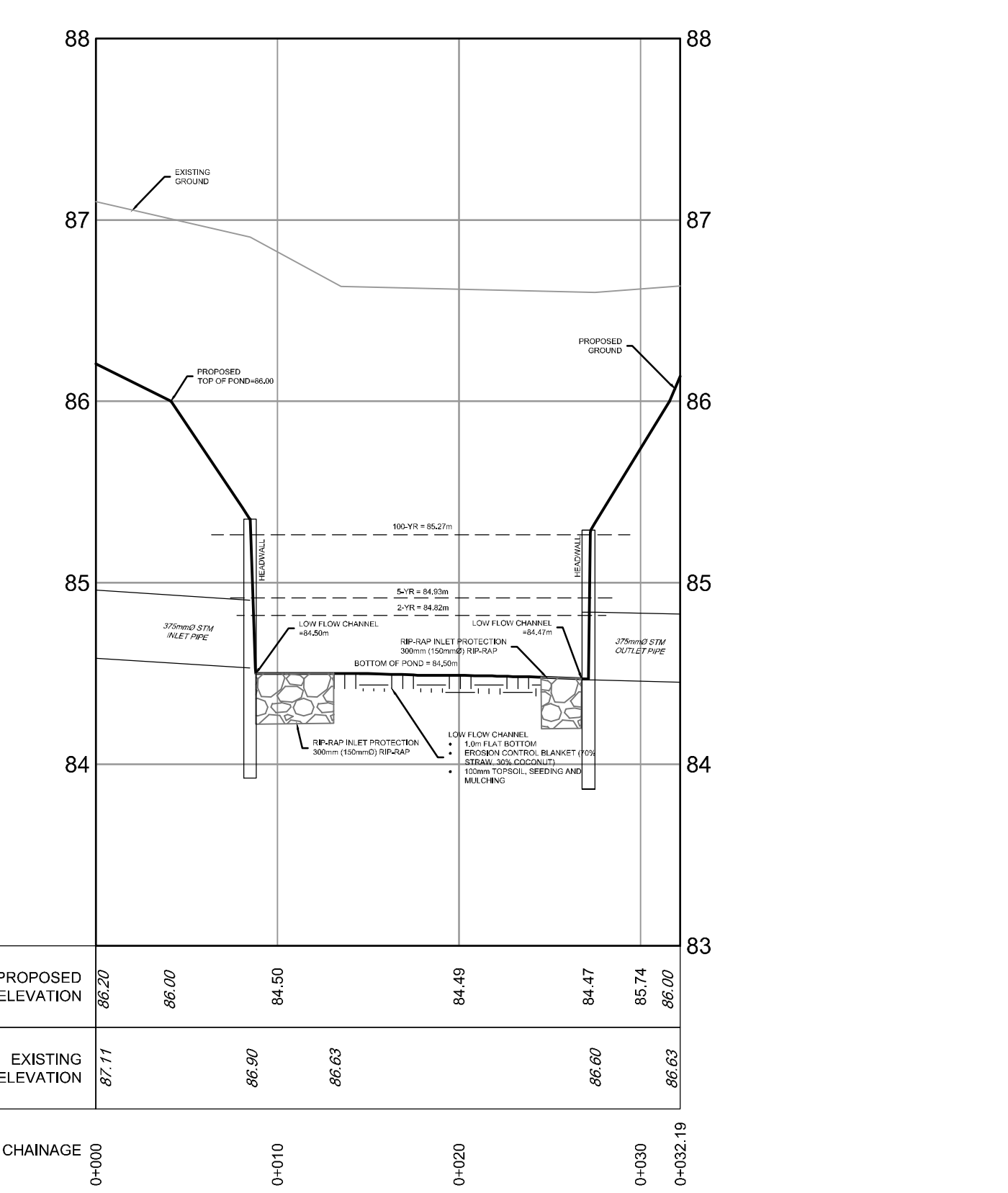
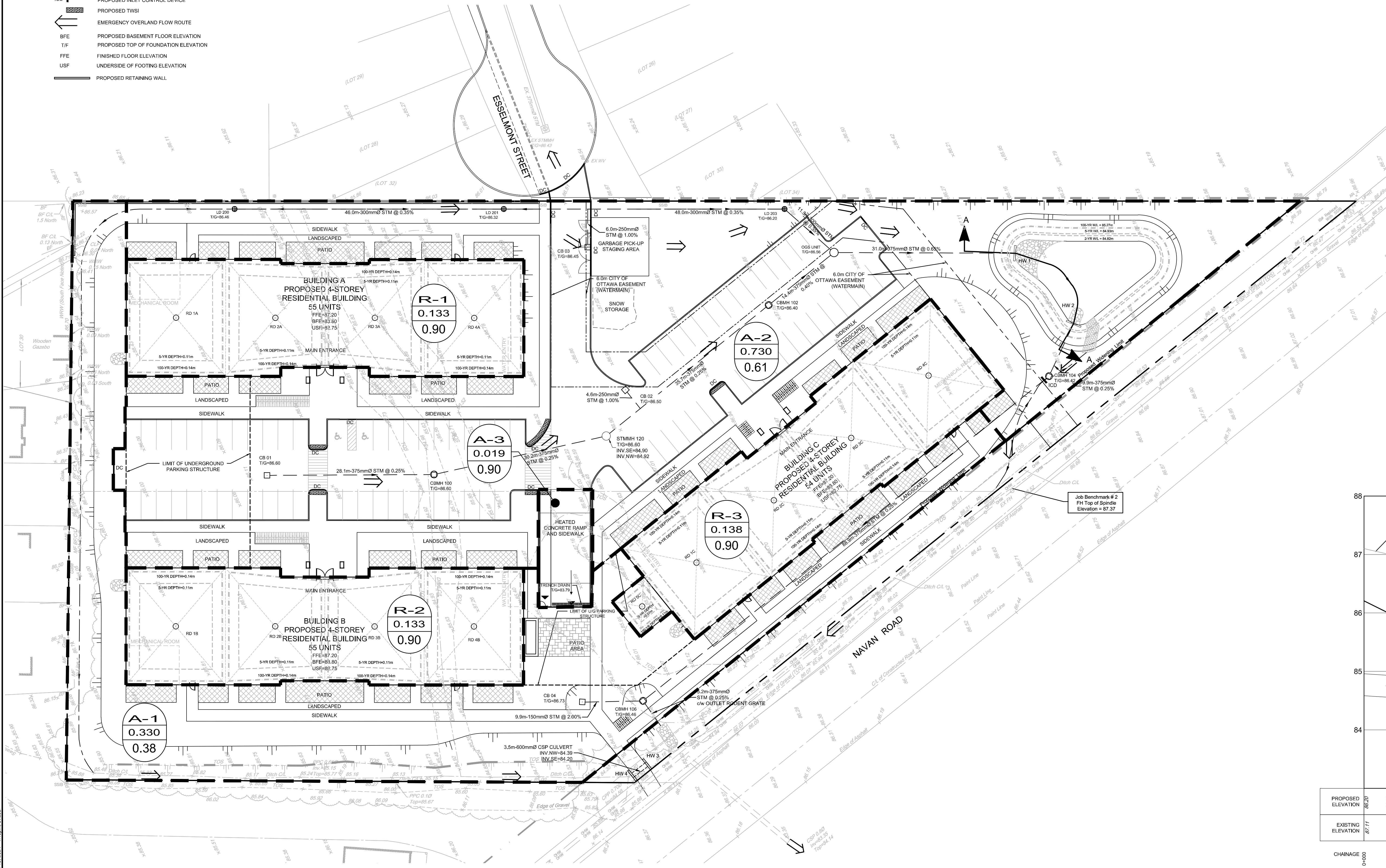


**GENERAL NOTES:**

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- 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 DRAWING.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS COINSURED.
- 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.
- 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.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO GEOTECHNICAL REPORT (NO. P06882-1, REVISION 1, DATED JANUARY 26, 2024), PREPARED BY PATERSON GROUP INC. FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS AND GEOTECHNICAL MEMO (P06882-04, GEOTECHNICAL REVIEW - GRADING PLAN, DATED FEBRUARY 27, 2024), PREPARED BY PATERSON GROUP INC. FOR THE GEOTECHNICAL RECOMMENDATION FOR THE PLACEMENT OF LIGHT WEIGHT FILL AND INSULATION THICKNESS REQUIRED FOR SHALLOW SEWERS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO WEIGHTING OF THE GRANULAR MATERIAL.
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDWARE SURFACE AREAS AND DIMENSIONS.
- REFER TO DEVELOPMENT SERVICING STUDY & STORMWATER MANAGEMENT REPORT (R-2023-024) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
- SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- PROVIDE LINE/PARKING PAINTING.
- 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/O ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

**BENCHMARK NOTES:**

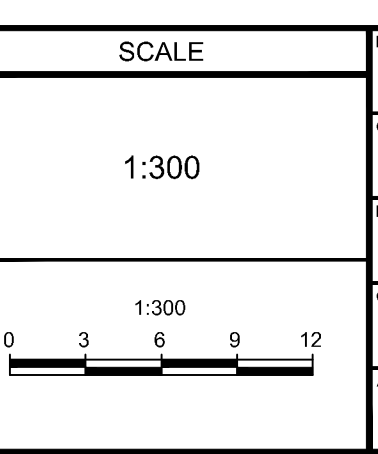
- ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM CONTROL MONUMENT NO. 00119653022 HAVING AN ELEVATION OF 66.707 METRES.
- IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
- BENCHMARK WAS PROVIDED ON TOPOGRAPHIC PLAN OF SURVEY OF LOT 4, CONVECTION 4 (OTTAWA FRONT) GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN AND VOLEBEK LTD.



NOTE:  
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, 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.

**OWNER INFORMATION**  
262576 ONTARIO INC.  
231 BRITANNIA DRIVE, SUITE D  
OTTAWA, ONTARIO, K1K 0R8  
LALIT AGGARWAL  
PHONE: (613) 746-1647  
lsa@manorparkcap.com

No.	REVISION	DATE	BY
4.	REVISED PER GEOTECHNICAL COMMENTS	FEB 27/24	FST
3.	REVISED PER CITY COMMENTS	FEB 14/24	FST
2.	REVISED PER CITY COMMENTS	NOV 13/23	FST
1.	ISSUED FOR SITE PLAN CONTROL APPROVAL	JUNE 02/23	FST



DESIGN	FOR REVIEW ONLY
CHECKED: Z/ACV	
DRAWN: FST	
CHECKED: Z/ACV	
APPROVED: FST	
APPROVED: FST	



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Website: www.novatech-eng.com

LOCATION  
CITY OF OTTAWA  
3317 NAVAN ROAD  
DRAWING NAME  
**POST-DEVELOPMENT STORM DRAINAGE AREA PLAN**  
PROJECT NO.: 118076  
REV: #4  
DRAWING NO.: 118076-STM2  
Plan #19008

D07-12-23-0085