



re: Grading & Servicing Plan Review
Proposed Multi-Storey Building
1166 Bank Street – Ottawa, Ontario

to: Ambassador Realty Inc. – **Arthur Loeb** – arthurloeb@gmail.com

cc: Architects DCA – **Toon Dreessen** – tdreessen@architectsDCA.com

date: July 25, 2023

file: PG6191-MEMO.02

Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to document our review of the grading and servicing plans for the proposed development to be located at 1166 Bank Street in the City of Ottawa. The following memorandum should be read in conjunction with the current Geotechnical Investigation Report (Paterson Group Report PG6191-1 Revision 1 dated July 25, 2023).

Grading Plan Review

Paterson reviewed the following drawing prepared by EXP for the aforementioned development:

- Site Grading Plan – 1166 Bank Street, Ottawa – Project No. OTT – 22018175 – A0 – Drawing No. C200 - Revision 1 dated February 7, 2023.

Based on our review of the above-noted grading plan drawing, the proposed grade raises at the subject site are within the recommended permissible grade raise of 1.0 m. Therefore, the proposed grading is acceptable, from a geotechnical perspective.

Site Servicing Plan Review

Paterson reviewed the following drawing prepared by EXP for the aforementioned development:

- Site Servicing Plan – 1166 Bank Street, Ottawa – Project No. OTT – 22018175 – A0 – Drawing No. C100 - Revision 1 dated February 7, 2023.

Based on our review of the site servicing plan, sufficient soil cover has been provided to the proposed watermain and sanitary services. However, insufficient soil cover was noted to be provided to the proposed stormwater service. Where insufficient soil cover (i.e. less than 2.1 m of soil cover is present above the obvert of the pipe) is available, the following frost protection criteria outlined in Table 1 should be followed. Please refer to Figure 1 – Servicing Plan Review attached which indicates the frost protection provided to each service.





Table 1 - Rigid Insulation Recommendations for Storm Sewer and Water Pipes with Reduced Soil Cover			
Thermal Condition	Soil Cover Provided (mm)	Insulation Dimensions	
		Thickness (mm)	Extension (mm)
Unheated	600 to 900	125	Extend 1200 mm horizontally beyond edge face of the pipe
	900 to 1200	100	Extend 1200 mm horizontally beyond edge face of the pipe
	1200 to 1500	75	Extend 900 mm horizontally beyond edge face of the pipe
	1500 to 1800	50	Extend 600 mm horizontally beyond edge face of the pipe
	1800 to <2100	25	Extend 300 mm horizontally beyond edge face of the pipe

Notes: All designs are based on a freezing index of 1000°C-days

All rigid insulation should consist of either Dow Chemical High-Load 40 (HI-40), Styro Rail SR.P400, or equivalent approved by Paterson. The placement of all insulation within the service trenches must be reviewed and approved by Paterson personnel at the time of construction.

We trust that this information satisfies your immediate requirements.

Best Regards,

Paterson Group Inc.

Kevin A. Pickard, P.Eng.



Scott S. Dennis, P.Eng.



Figure 1 - Servicing Plan Review

Proposed Stormwater Sewer

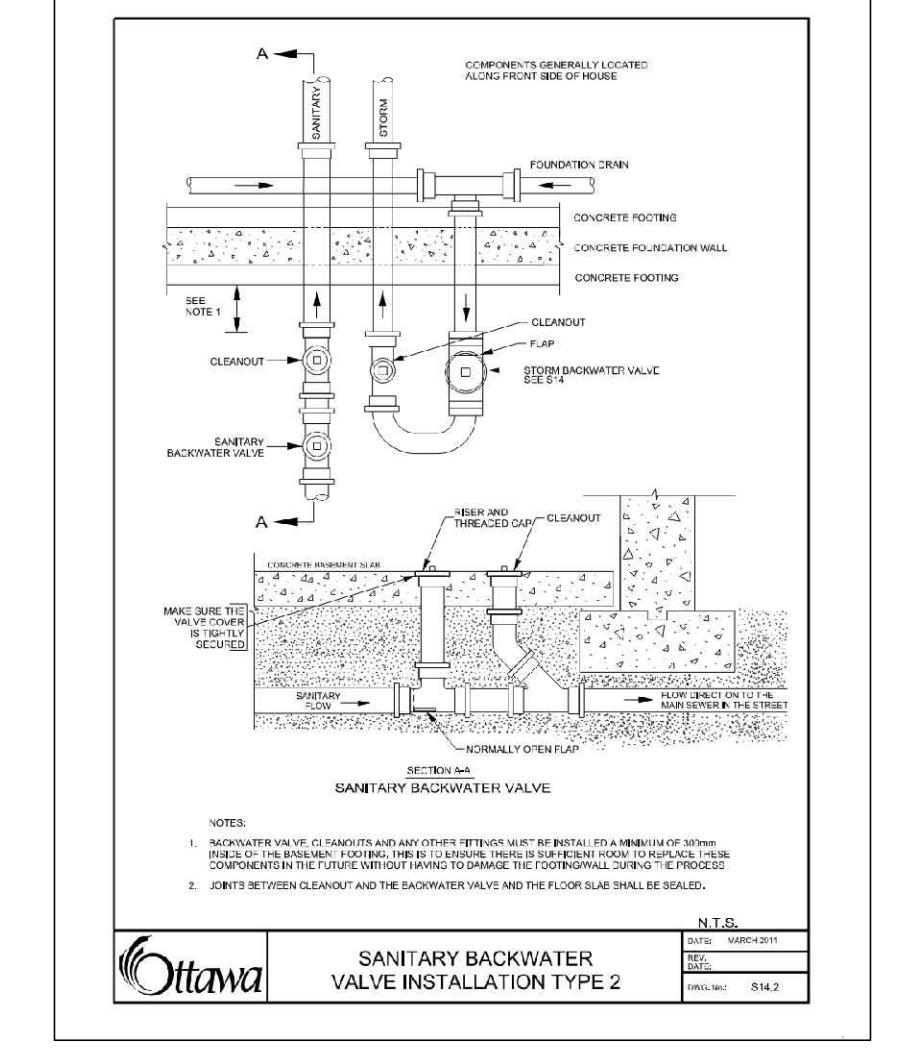
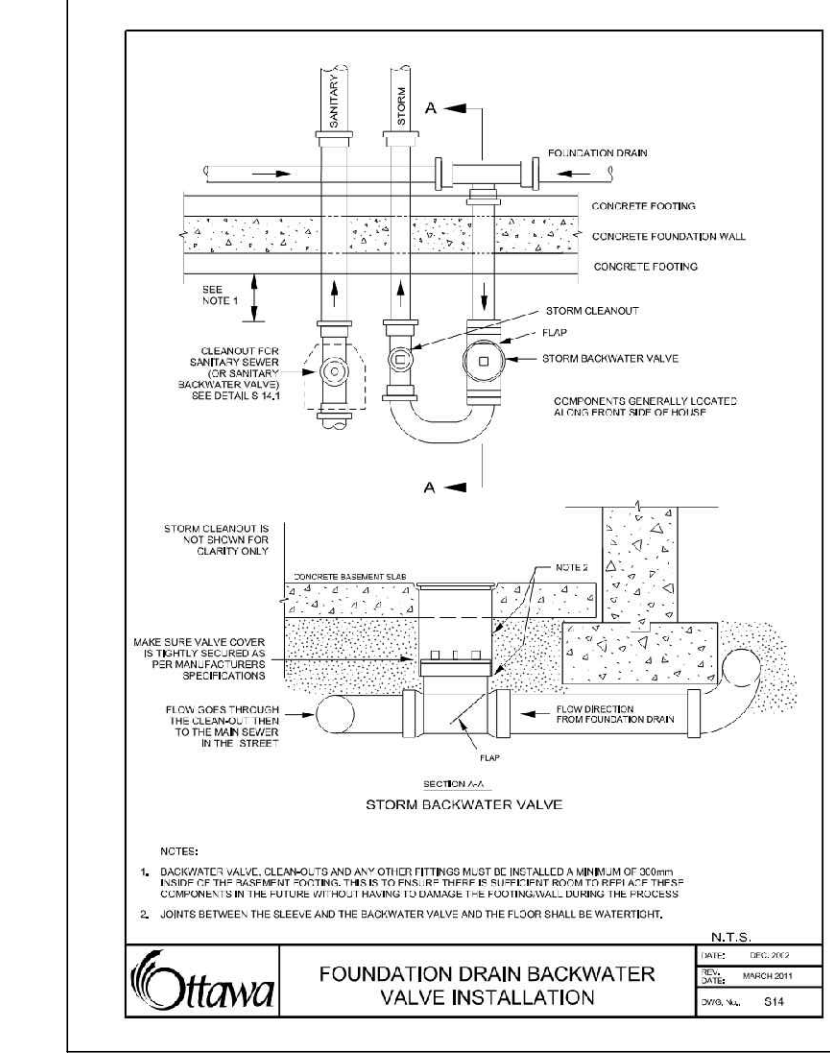
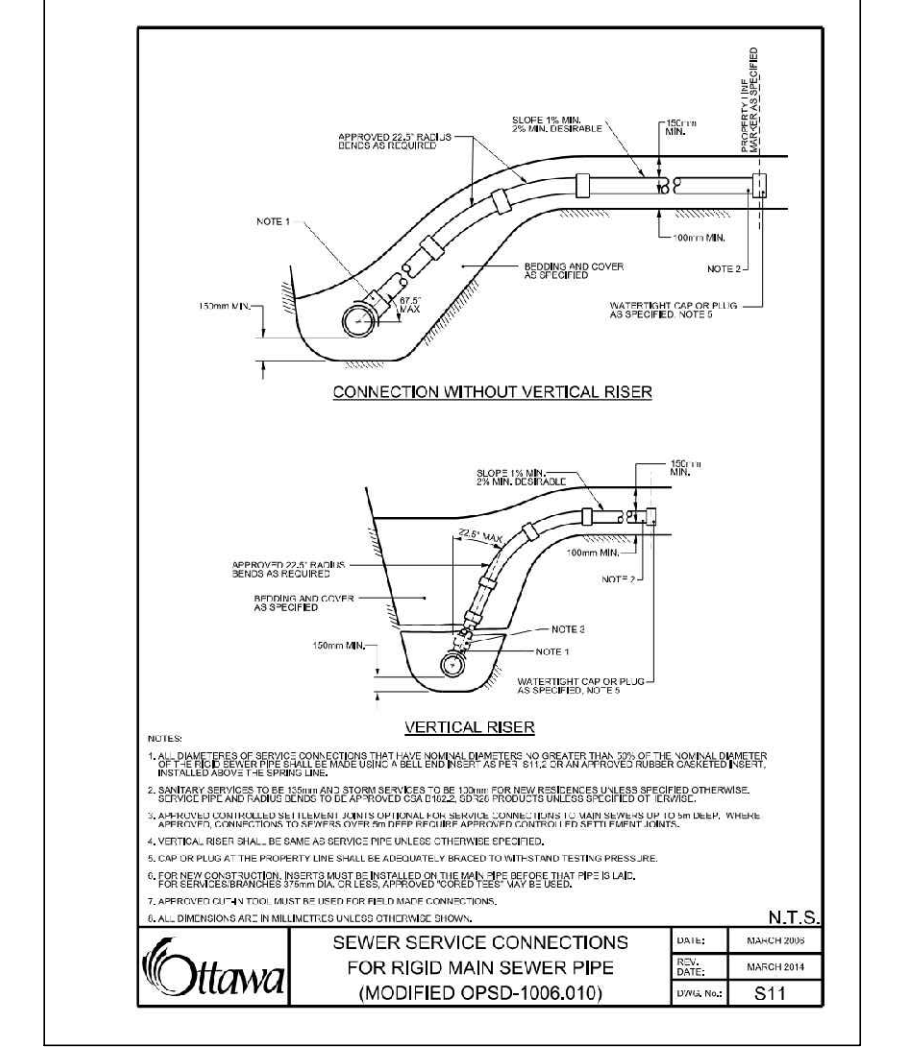
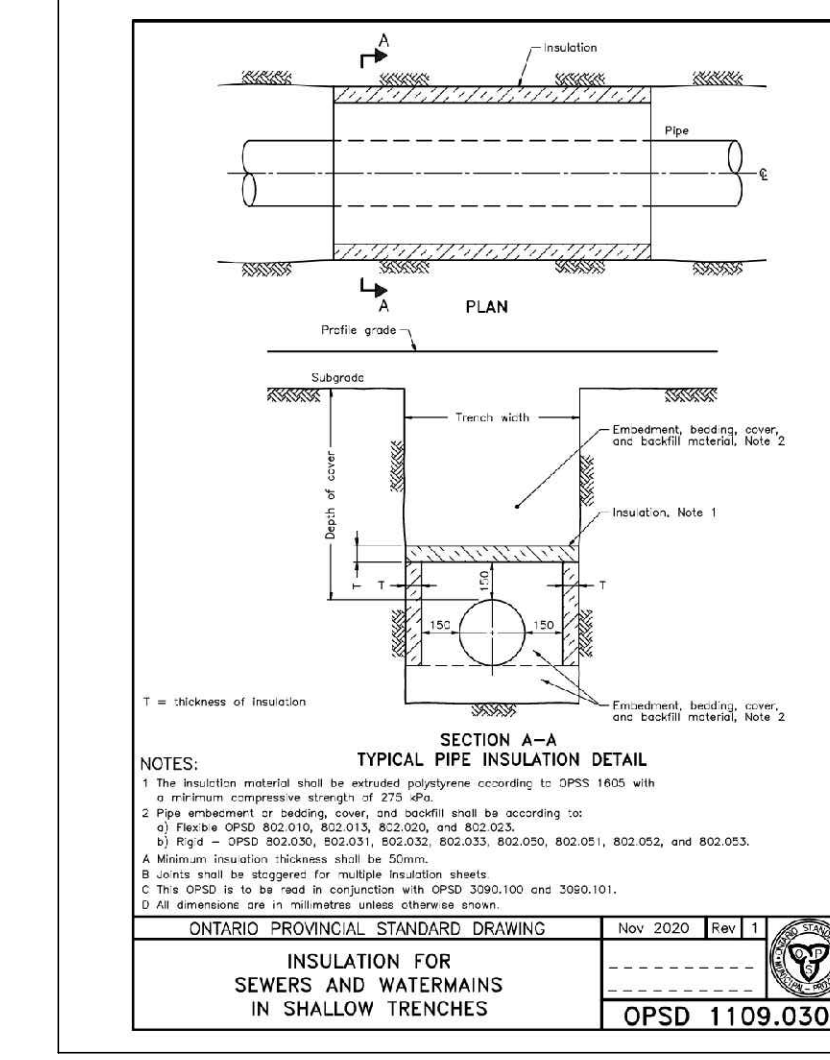
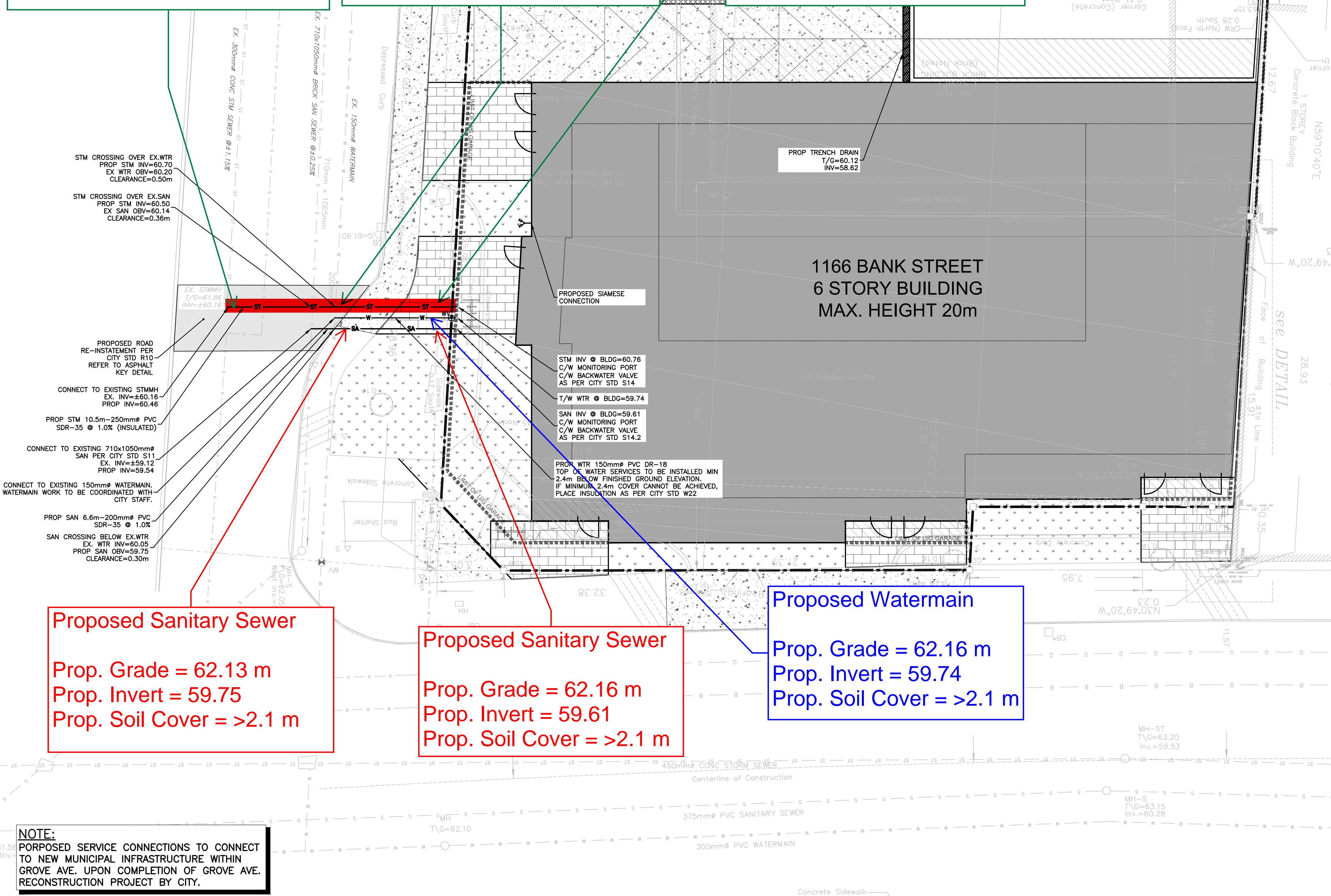
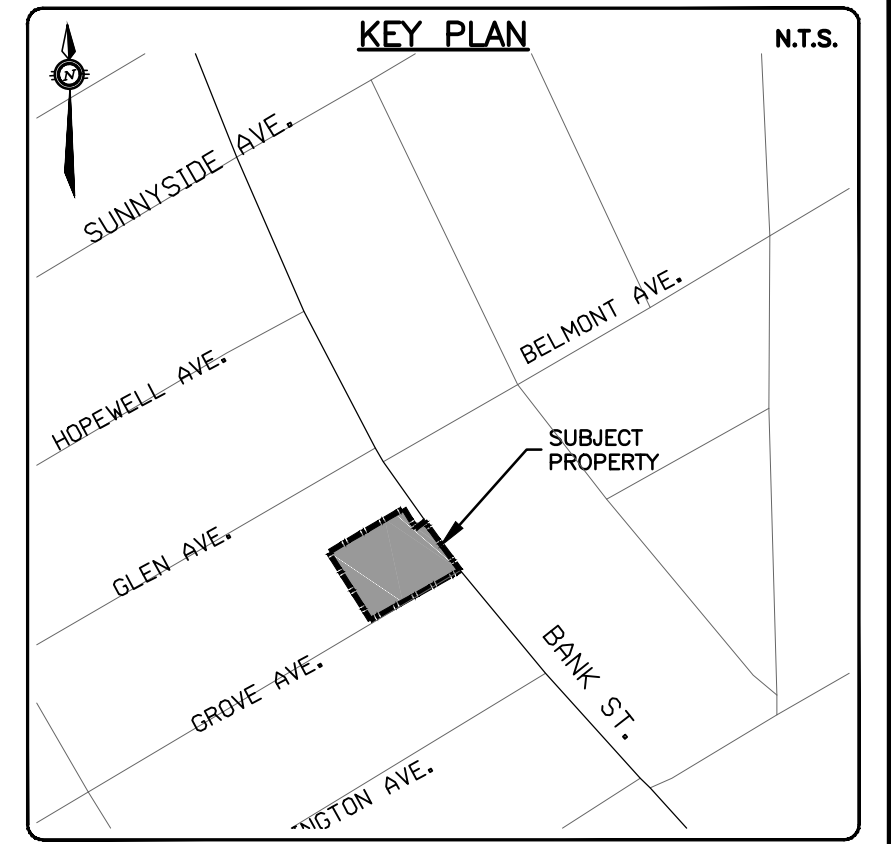
Ex. Grade = 61.86 m
 Prop. Invert = 60.46
 Prop. Soil Cover = < 2.1 m

Proposed Stormwater Sewer

Prop. Grade = 62.13 m
 Prop. Invert = 60.70
 Prop. Soil Cover = < 2.1 m

Proposed Stormwater Sewer

Prop. Grade = 62.16 m
 Prop. Invert = 60.76
 Prop. Soil Cover = < 2.1 m

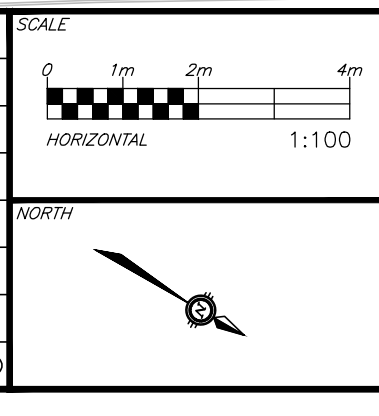


CAUTION
 THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK,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

JOB BENCH MARK
 JBM ▲
 TWO (2) NAILS IN UTILITY POLE LOCATED AT SOUTH-WEST CORNER OF SITE ALONG GROVE AVENUE. ELEVATION=62.58

TOPOGRAPHIC INFORMATION
 LOT 81, PART OF LOTS 80 & 82, REGISTERED PLAN 109930, CITY OF OTTAWA. TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN VOLLEBEKK LTD, SURVEY DATED FEBRUARY 10, 2022. SITE GRID SYSTEM MTM NAD 83, ZONE 9.

REV	REVISION DESCRIPTION	DATE	BY	APPD
1	ISSUED FOR SITE PLAN CONTROL	23/02/07	AAS	KH



DESIGNED BY: [Signature]
 REVIEWED BY: [Signature]
 CLIENT: AMBASSADOR REALTY INC.
 185 SOMERSET ST. W., OTTAWA, ON, K2P 0J2

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**1166 BANK STREET
OTTAWA, ONTARIO.**

SITE SERVICING PLAN

PROJECT No. OTT-22018175-AD
 SURVEY ADV
 DATE JANUARY 2023
 DRAWING No. C100