



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

**to:** Ambassador Realty Inc. – **Arthur Loeb** – [arthurloeb@gmail.com](mailto:arthurloeb@gmail.com)

**cc:** Architects DCA – **Toon Dreessen** – [tdreessen@architectsDCA.com](mailto:tdreessen@architectsDCA.com)

**date:** July 25, 2023

**file:** PG6191-MEMO.02

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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.





<b>Table 1 - Rigid Insulation Recommendations for Storm Sewer and Water Pipes with Reduced Soil Cover</b>			
<b>Thermal Condition</b>	<b>Soil Cover Provided (mm)</b>	<b>Insulation Dimensions</b>	
		<b>Thickness (mm)</b>	<b>Extension (mm)</b>
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

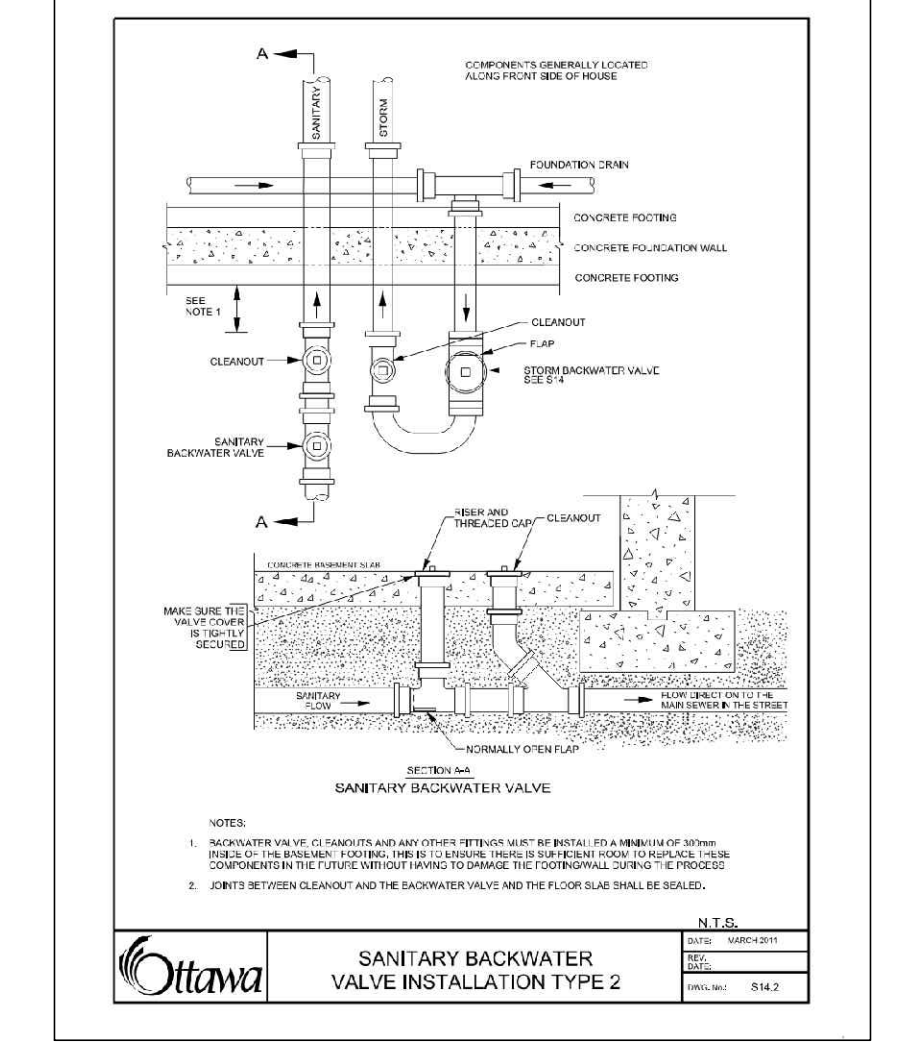
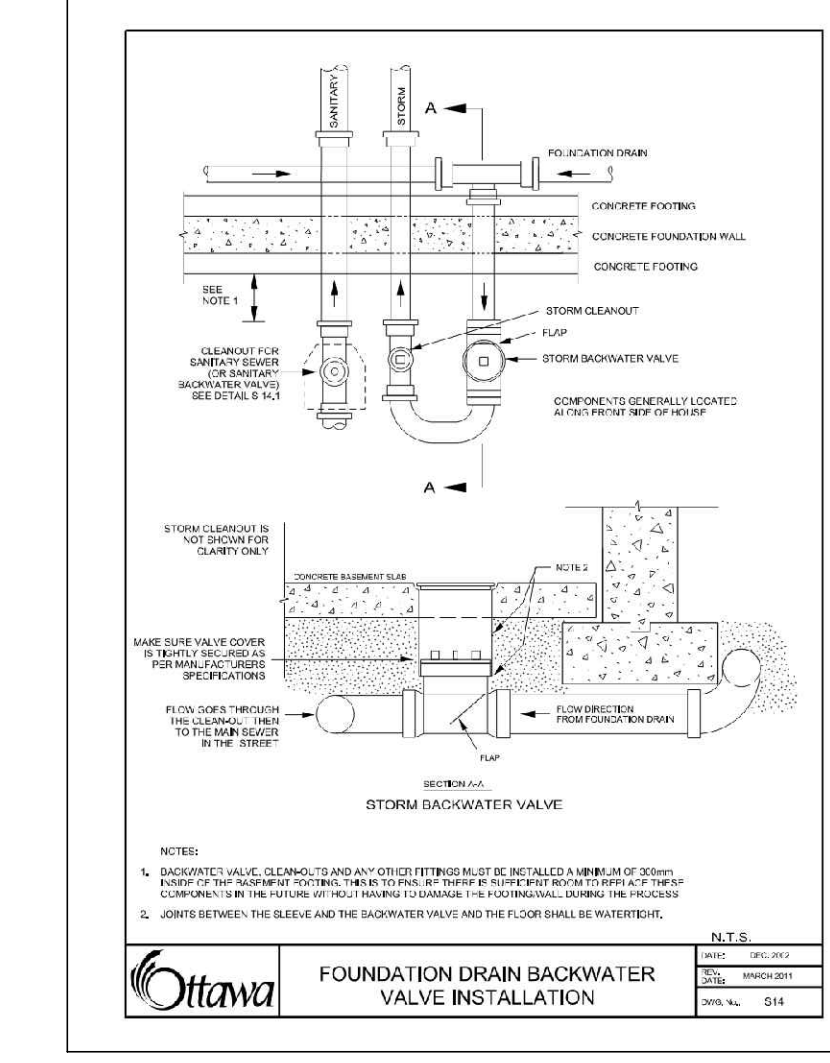
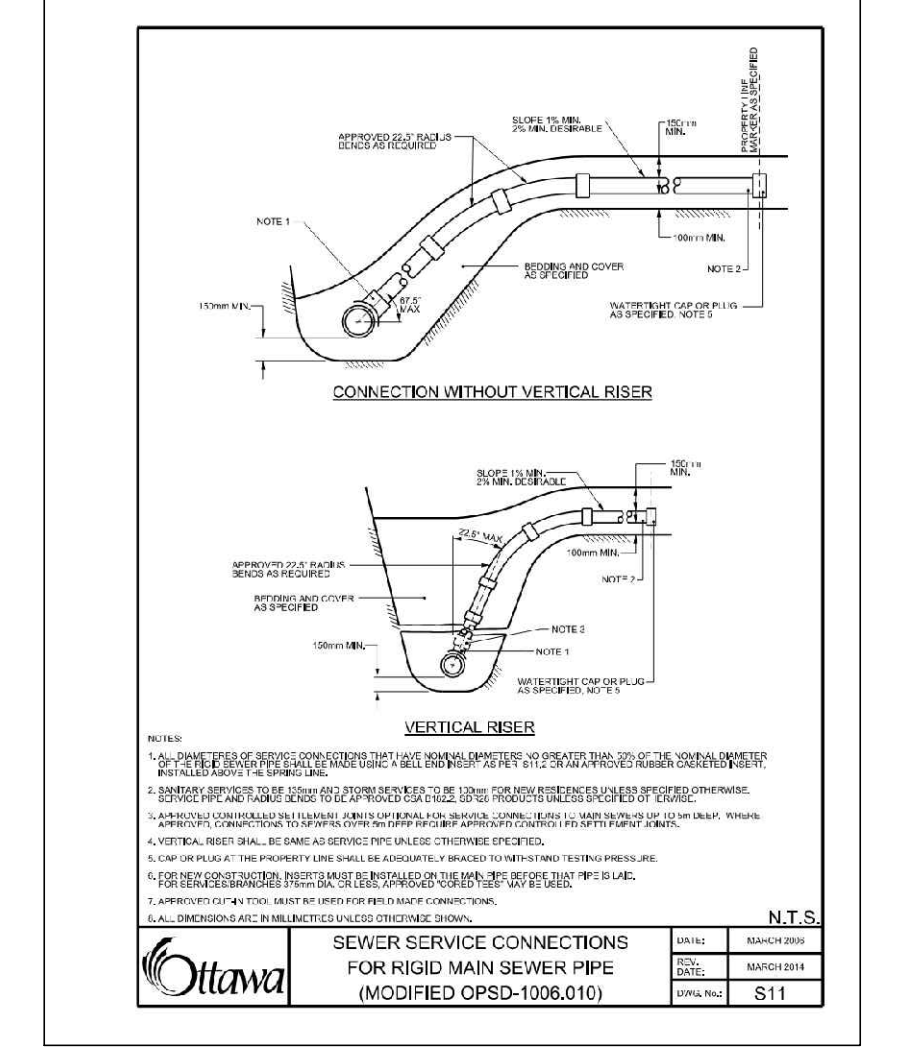
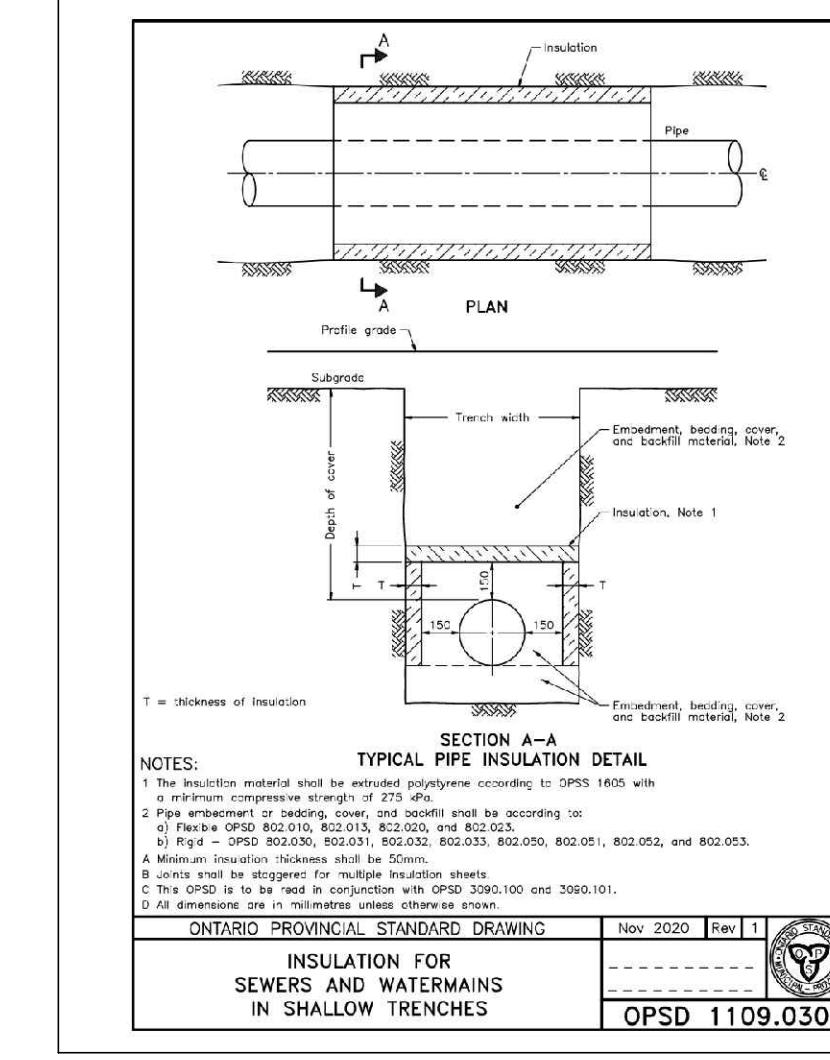
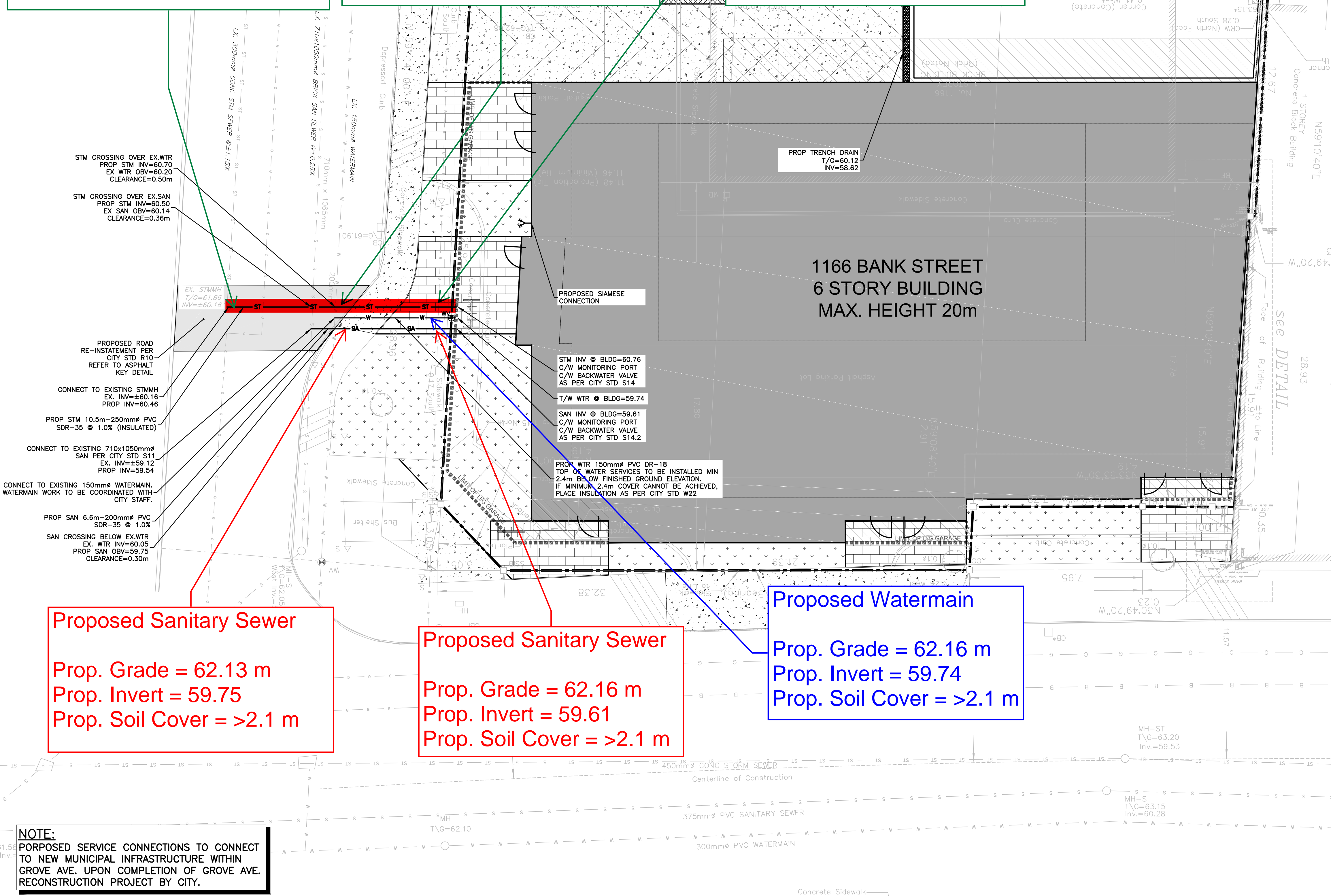
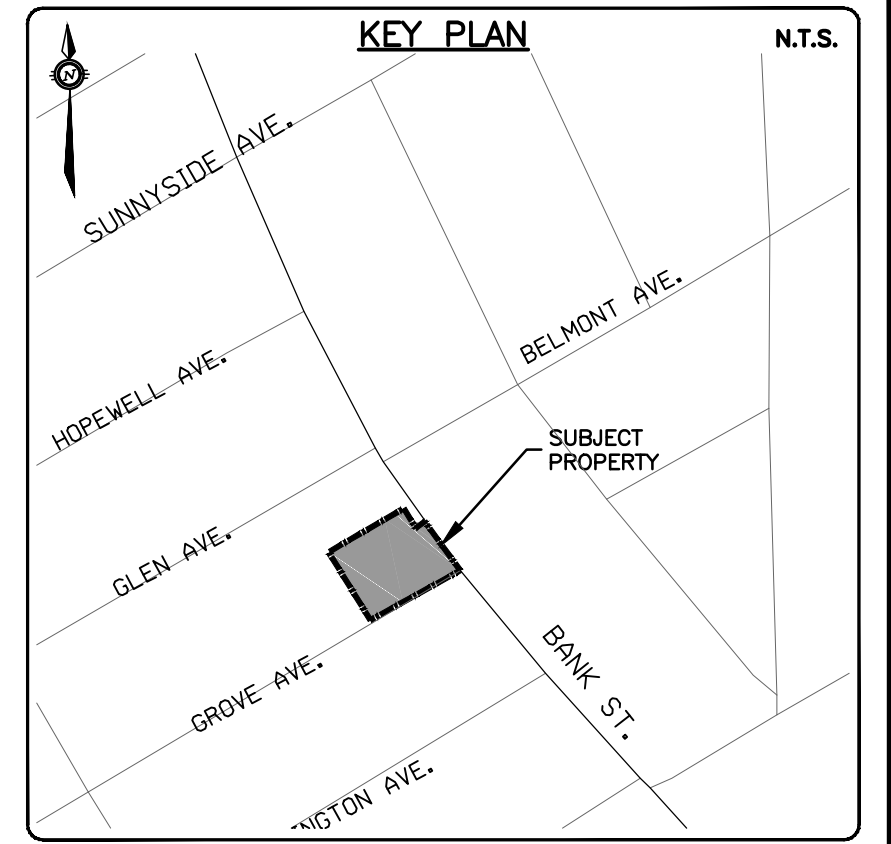
Ex. Grade = 61.86 m  
 Prop. Invert = 60.46  
 Prop. Soil Cover = < 2.1 m

## 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



## Proposed Sanitary Sewer

Prop. Grade = 62.13 m  
 Prop. Invert = 59.75  
 Prop. Soil Cover = >2.1 m

## Proposed Sanitary Sewer

Prop. Grade = 62.16 m  
 Prop. Invert = 59.61  
 Prop. Soil Cover = >2.1 m

## Proposed Watermain

Prop. Grade = 62.16 m  
 Prop. Invert = 59.74  
 Prop. Soil Cover = >2.1 m

**NOTE:**  
 PROPOSED SERVICE CONNECTIONS TO CONNECT TO NEW MUNICIPAL INFRASTRUCTURE WITHIN GROVE AVE. UPON COMPLETION OF GROVE AVE. RECONSTRUCTION PROJECT BY CITY.

**CAUTION**  
 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.

**JOB BENCH MARK**  
 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

SCALE: 1:100

DESIGNED BY: [Signature]

REVIEWED BY: [Signature]

CLIENT: AMBASSADOR REALTY INC. 185 SOMERSET ST. W, OTTAWA, ON, K2P 0J2

exp Services Inc. 2550 Desparre Ave. Unit 100 Ottawa, ON K1R 6S6

PROJECT: 1166 BANK STREET OTTAWA, ONTARIO.

DATE: JANUARY 2023

DRAWING No: C100

DESIGN	AS	PROJECT	1166 BANK STREET OTTAWA, ONTARIO.
CHECKED	AS	PROJECT	1166 BANK STREET OTTAWA, ONTARIO.
CAD	AS	TITLE	SITE SERVICING PLAN
PROJECT MANAGER	KH		
APPROVED	AA		