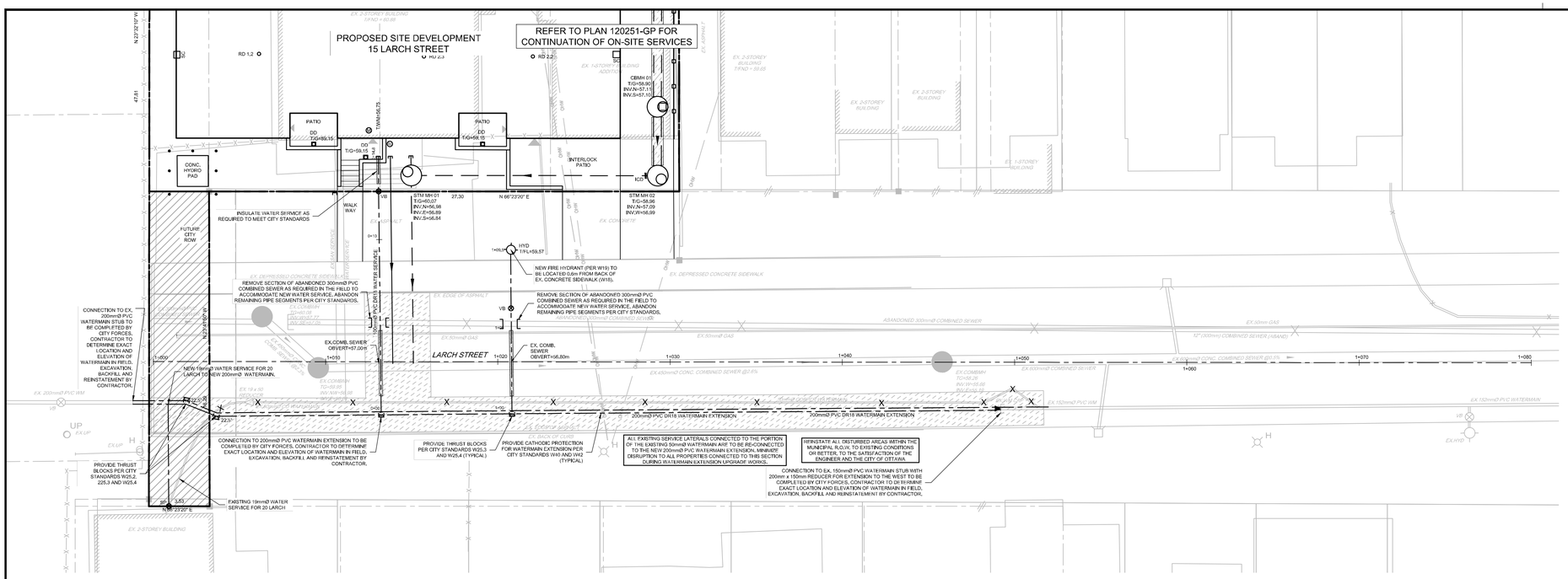
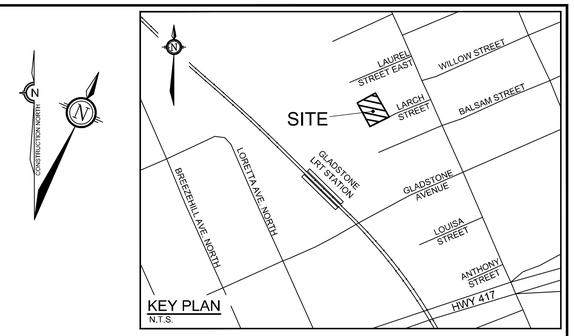


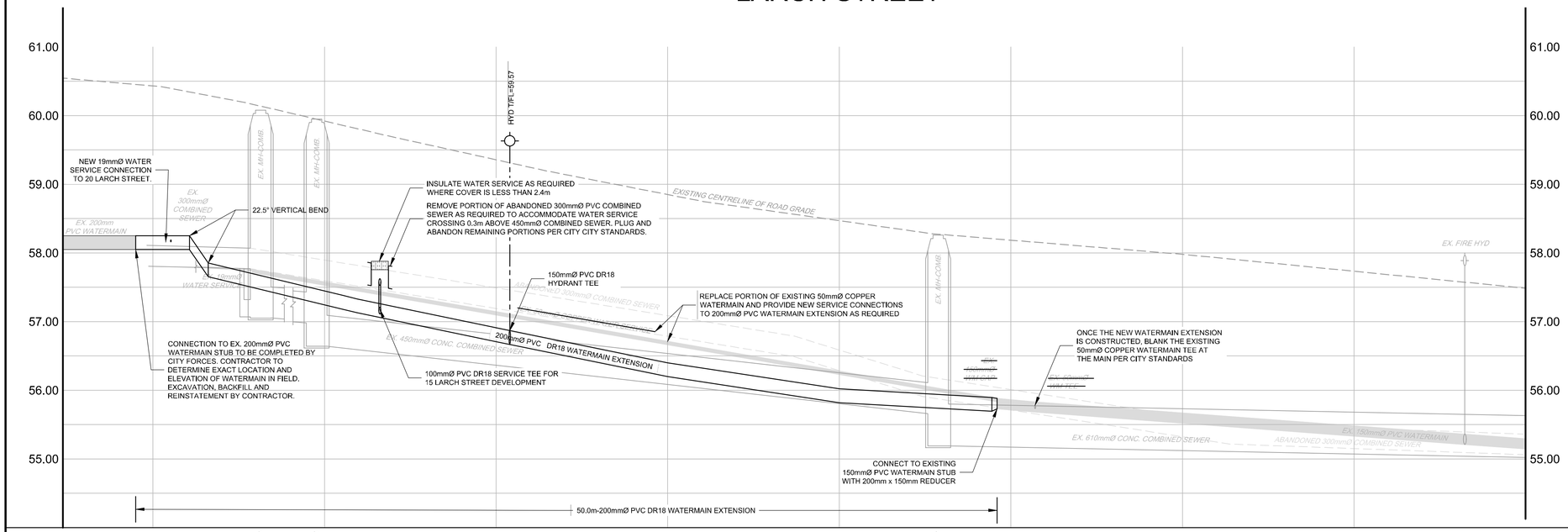


KEY PLAN
N.T.S.

LEGEND

150mmØ	PROPOSED WATERMAIN EXTENSION
VB	PROPOSED VALVE & VALVE BOX
BEND	PROPOSED BEND AND THRUSTBLOCK 11.25°, 22.5°, 45° or TEE
	PROPOSED CAP
MH-COMB	EXISTING COMBINED MH & SEWER
OHW	EXISTING OVERHEAD WIRES
	EXISTING CONCRETE CURB
SANMH	EXISTING SANITARY MANHOLE & SEWER
HYD VA/VB	EXISTING HYDRANT & VALVE
	EXISTING TREES / VEGETATION
EX UP	EXISTING UTILITY POLE
	EXISTING FENCE
150mmØ WM	EXISTING WATERMAIN

LARCH STREET



EXISTING GROUND ELEVATION		60.43±				T/G=60.08		T/G=59.95 59.92			59.36			58.85			58.47		T/G=58.26		58.19		57.38			57.73			57.40±	EXISTING GROUND ELEVATION
TOP OF WATERMAIN ELEVATION		58.25	58.25	58.15	58.25	57.85	57.76±	57.47	57.47	57.33	57.33	56.91	56.72	56.40	200mmØ PVC DR18 WATERMAIN EXTENSION		56.02	~~EX. 50mmØ COPPER WATER SERVICE~~		55.88	55.88±	55.63±	EX. 150mmØ PVC WATERMAIN					55.35±		TOP OF WATERMAIN ELEVATION
COMBINED SEWER INVERTS	EX. 19mmØ SERVICE				EX. 300mmØ COMBINED SEWER			INV=57.77 INV=57.05	56.88 56.63	EXISTING 450mmØ CONC. COMBINED SEWER @ 2.3%			EX. 450mmØ CONCRETE COMBINED SEWER @ 2.6%						INV=55.66 INV=55.19					EX. 610mmØ CONCRETE COMBINED SEWER @ 0.5%						COMBINED SEWER INVERTS
DESCRIPTION																														DESCRIPTION
CHAINAGE		0+999	1+000	1+001.0 (15mm SERVICE)	1+002.0 (22.5° BEND)	1+003.1 (22.5° BEND)	EX. MH-COMB	EX. MH-COMB	1+010		1+013.2 (100mmØ TEE)		1+020	1+018.4 (FIRE HYDRANT)		1+030		1+040	EX. MH-COMB	1+049.2(200x150 REDUCER)	EX. WM CAP	1+050	SERVICE TEE		1+060		1+070	EX. FH HYD		1+080	CHAINAGE

BENCHMARK INFO:

ALL ELEVATIONS ARE REFERRED TO THE CGVD28 GEODETIC DATUM. DERIVED FROM THE CITY OF OTTAWA VERTICAL CONTROL MONUMENT No. 2016-0357 HAVING AN ELEVATION OF 60.088 METRES. BEARINGS ARE MTM GRID AND ARE REFERRED TO THE SOUTHERLY LIMIT OF LARCH STREET, HAVING A BEARING OF N 66° 23' 20" E AS SHOWN ON A SURVEYOR'S REAL PROPERTY REPORT BY ANNIS, O'SULLIVAN, VOLLEBEKK DATED NOVEMBER 2, 2017

THE EXISTING GRADES SHOWN ON THE PLANS ARE TAKEN DIRECTLY FROM SURVEYORS REAL PROPERTY REPORT PLAN (Ref. # 20-10-126-00), PREPARED BY J.D.BARNES LIMITED SIGNED AND DATED OCTOBER 22, 2020.

SURROUNDING BACKGROUND TOPO INFORMATION BEYOND THE LIMITS OF THE SITE SURVEY ARE FROM CITY OF OTTAWA MAPPING AND UCC PLANS SHOWING CONTEXT ONLY.

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 DRAWING.
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 $5,000,000.00. 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.
8. REFER TO GEOTECHNICAL INVESTIGATION REPORT (NUMBER PG6071-1, REV.1), DATED FEBRUARY 11, 2022, PREPARED BY PATERSON GROUP INC., 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 GRANULAR MATERIAL.
9. REFER TO MECHANICAL PLAN FOR ROOF DRAIN INFORMATION.
10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACED AREAS AND DIMENSIONS.
11. REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2022-001) PREPARED BY NOVATECH.
12. SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE-IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

WATERMAIN NOTES:

1. SUPPLY AND CONSTRUCT ALL WATERMAIN AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'. THRUST BLOCK RESTRAINTS OF WATERMAIN AND FITTINGS SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA SPECIFICATIONS F-4492.
2. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
HYDRANT INSTALLATION	W19	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
THERMAL INSULATION BY OPEN STRUCTURES	W23	CITY OF OTTAWA
WATERMAIN CROSSING OVER SEWER	W25.2	CITY OF OTTAWA
CONCRETE THRUST BLOCKS (UNDER 400mmØ)	W25.3	CITY OF OTTAWA
THRUST BLOCK TABLE (UNDER 400mmØ)	W25.4	CITY OF OTTAWA
WATERMAIN MATERIAL	PVC DR 18 (100mm AND LARGER)	

3. 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. EXCAVATION, INSTALLATION OF SERVICE, BACKFILL AND RESTORATION BY THE CONTRACTOR.
4. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
5. PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, UNLESS OTHERWISE INDICATED.
6. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

NOTE:
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.

OWNER INFORMATION
15-19 LARCH ST. INC.
359 KENT STREET, SUITE 503,
OTTAWA, ONTARIO, K2P 0R6
ROBERTO CAMPAGNA
PHONE: (613) 851-7823
roberto@rocahomes.ca

No.	REVISION	DATE	BY
6	REVISED PER CITY COMMENTS	DEC 8/23	MS
5	REVISED PER NEW SITE PLAN	OCT 27/23	MS
4	EXTENDED 200mm DIA. WATERMAIN	APRIL 6/23	MS
3	REVISED PER ADDITIONAL CITY COMMENTS	MAR 27/23	MS
2	REVISED PER CITY COMMENTS	SEPT 2/22	MS
1	ISSUED FOR SITE PLAN APPROVAL	FEB 17/22	MS

SCALE
1:150 (0 2 4 6)
1:75 (0 1 2 3)

DESIGN: SM
CHECKED: MS
DRAWN: DWM / SM
CHECKED: SM
APPROVED: MS

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
M. SAVIC
100102651
12/08/23
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
15 LARCH STREET

DRAWING NAME
WATERMAIN EXTENSION
PLAN AND PROFILE
(1+000 to 1+080 ℄ LARCH STREET)

PROJECT No. 120251
REV REV # 6
DRAWING No. 120251-PR1

D07-12-22-0027

PLAN #18698

PLANA1.DWG - 841mmx594mm

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