



Staff Report

Planning & Development Services – Development Engineering

Report To: Committee of the Whole
Meeting Date: September 21, 2021
Report Number: PDS.21.120 - REVISED
Title: Updated Follow-Up Report RE: Walkout Basements & Drainage in Cottages at Lora Bay Phase 5
Prepared by: Brian Worsley, Manager Development Engineering

A. Recommendations

THAT Council receive Staff Report PDS.21.120, entitled “Updated Follow-Up Report RE: Walkout Basements & Drainage in Cottages at Lora Bay Phase 5” for information purposes.

B. Overview

At the Monday, July 12, 2021, Council meeting, Council received for information the deputation material from Elizabeth Brims to the June 29th Committee of the Whole regarding “The Cottages at Lora Bay Phase 5, Planning Application”. Council referred the deputation material to Planning & Development Services, Development Engineering, for a staff report in response to the deputation. Staff Report PDS.21.095, entitled Follow-Up Report Re: Walkout Basements & Drainage in Cottages at Lora Bay Phase 5 was presented to the August 11th Committee of The Whole. At the August 23rd, 2021, Council meeting, Council requested a second information follow-up report.

This report seeks to provide the additional information on the engineering grading and stormwater management & drainage that Council is understood to have requested.

C. Background

At the August 23, 2021, Council meeting, Council resolved as follows:

Moved by: Councillor Hope

Seconded by: Councillor Matrosovs

THAT Council defers consideration of Staff Report PDS.21.095, entitled “Follow-Up Report Re: Walkout Basements & Drainage in Cottages at Lora Bay Phase 5, PDS.21.095”, to a future Committee of the Whole Meeting, or at the call of the Chair

The motion is Carried

This report provides the updated information requested by Council at the August 23, 2021, meeting, in response to staff report [PDS.21.095 Follow up report Re Walkout Basements & Drainage in Cottages at Lora Bay Phase 5.](#)

The previous report contained a comparison of 2008 Proposed Grading Plan and the updated 2021 Proposed Grading Plan. Attachment 1 to this report shows the same Proposed Grading Plans from 2008 and 2021. However, Staff have also added 1944, 1989, 2015, and 2019 topographic data to address past enquiries regarding the grading of the property over time. When reviewing Attachment 1, it is important to note that historic topographic measurements were not as precise and were taken at larger scales. As a result, not as much detail is captured and some steeper slopes that may have existed at that time are shown to be more gradual.

D. Analysis

The October 2006 Draft Plan conditions approved by the County required that detailed Engineering drawings be submitted to the Town's satisfaction for each phase of the Cottages Development. The 2008 Engineering drawings submitted for Phase 1 of the Cottages Development, provided detailed drawings for Phase 1, and adequate detail for the remaining phases to verify construction feasibility.

As a general practice, during the review of detailed engineering drawings for draft approved (i.e. approved subject to conditions) developments, the Town undertakes a rigorous review. The submission received from a developer's consultants are reviewed against the following documents: Town Engineering Standards, Ontario Provincial Standards, the Ministry of Environment Conservation and Parks Stormwater Management Planning and Design Manual, the Ministry of Transportation Drainage Management Manual, Transportation Association of Canada Guidelines, amongst other reference documents.

With draft approval granted and conditions established, this stage of the development review does not include public consultation. Rather, the Planning Act outlines that once conditions of approval are satisfied, including the approvals of engineering submissions, a development may proceed forward to the creation of lots, and then the building of homes according to zoning and Ontario Building Code requirements.

Staff have heard that stormwater management & drainage issues are a concern to the residents in the Cottages at Lora Bay development. As noted below, the current proposed design (i.e. 2021 Proposed Design) provides a more resilient stormwater management & drainage solution than the 2008 Proposed Design. The updated 2021 design incorporates a revised road design that ensures less water drains towards the existing residences in Phase 1.

Specifically, the 2008 Proposed Design had a road that sloped towards Phase 1. The 2021 Proposed Design now proposes a road that is crowned in the middle with boulevards that are intended to intercept more stormwater. The 2021 Proposed Design also includes a less significant retaining wall at the bottom of Nipissing Ridge, resulting in reduced future maintenance costs for the condominium.

From a more detailed perspective, the 2008 engineering drawings proposed the Phase 5 road, Schooner's Lane, to be a superelevated road with a profile high point at 191.52 (approximately 1.32 m above existing ground). Attachment 2, Schooner's Reach Plan & Profile shows the proposed 2008 profile. The 2021 proposed engineering drawings now propose Schooner's Lane to be a conventional crowned road (where the entire servicing corridor is available for stormwater flow, rather than just one side) with a profile high point at 192.25 (approximately 2.05 m above existing ground). Attachment 3, Schooner's Lane Plan & Profile shows the proposed 2021 profile.

In summary, the 2021 Proposed Design has the following benefits:

- Has approximately twice the amount of stormwater capacity than the previous 2008 design
- Better protects Phase 1 from extreme weather events (i.e. those beyond the 1:100 Year storm)
- Lowers the height of the proposed retaining wall that has always been proposed at the south limit of the site, from a 2.7 metre maximum height to 2 metre maximum height
- Reduces the amount of fill that needs to be removed from the site (consistent with Ontario Regulation 406/19), and,
- Provides a better overall stormwater management solution through enhancing the overland flow capacity of Schooner's Lane.

For additional visual understanding of the change in grading, comparisons of 2008 vs. 2021 house sections of both Lots 35 and 40 in Phase 5 are provided in Attachment 4.

Town Staff are aware of the desire of some existing residents to have Schooner's Lane (Phase 5) be constructed at the same elevation as Anchor's Way, thereby reducing or eliminating walkout units constructed on Schooner's Lane. To be clear, the 2008 Proposed Design was never intended to be at the same elevation as Anchor's Way. With regard to the walkout unit issue, the Town does not have the authority to prohibit walkout basements where the proposed home design meets zoning requirements, Ontario Building Code, and any applicable conservation authority requirements. In this case, while the 2021 Proposed Design does increase the grade by 0.7 metres or less from what was previously proposed in 2008 and does facilitate walkout units, it is staff's Professional Engineering opinion that the new design provides a more resilient stormwater management and drainage solution for the development.

E. Strategic Priorities

1. Communication and Engagement

We will enhance communications and engagement between Town Staff, Town residents and stakeholders

F. Environmental Impacts

Natural heritage considerations were evaluated and vetted during the planning approvals of the draft plan of condominium.

G. Financial Impacts

Should Town Council not accept staff Professional Engineering opinion regarding the detailed engineering submission for Phase 5 of the subject development, additional financial impacts may be incurred.

H. In Consultation With

Trevor Houghton, Manager of Community Planning
Tim Murawsky, Manager Building Services/Chief Building Official

I. Public Engagement

Public engagement for this development occurred during the planning approvals process leading up to draft approval by the County of Grey in October 2006. However, the Town's review of detailed engineering design submissions is guided by technical documents/standards and is not subject to further public consultation. However, any comments regarding this report should be submitted to Brian Worsley, Manager Development Engineering, developmentengineering@thebluemountains.ca

J. Attached

1. Topographic Profiles
2. Schooner's Reach Plan & Profile
3. Schooner's Lane Plan & Profile
4. Phase 5 House Sections of Lots 35 & 40 – 2008 vs. 2021 comparison

Respectfully submitted,

Brian Worsley
Manager Development Engineering

Nathan Westendorp
Director of Planning and Development Services

For more information, please contact:
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519-599-3131 extension 224

Report Approval Details

Document Title:	PDS.21.120 Updated Follow up Re Walkout Basements and Drainage in Cottages at Lora Bay Phase 5 .docx
Attachments:	- Attachment 1.pdf - Attachment 2.pdf - Attachment 3.pdf
Final Approval Date:	Sep 14, 2021

This report and all of its attachments were approved and signed as outlined below:

Brian Worsley - Sep 14, 2021 - 3:32 PM

Nathan Westendorp - Sep 14, 2021 - 5:35 PM

Report Approval Details

Document Title:	PDS.21.120 Updated Follow up Re Walkout Basements and Drainage in Cottages at Lora Bay Phase 5 .docx
Attachments:	<ul style="list-style-type: none">- Attachment 1.pdf- Attachment 2.pdf- Attachment 3.pdf- Attachment 4.pdf
Final Approval Date:	Sep 17, 2021

This report and all of its attachments were approved and signed as outlined below:

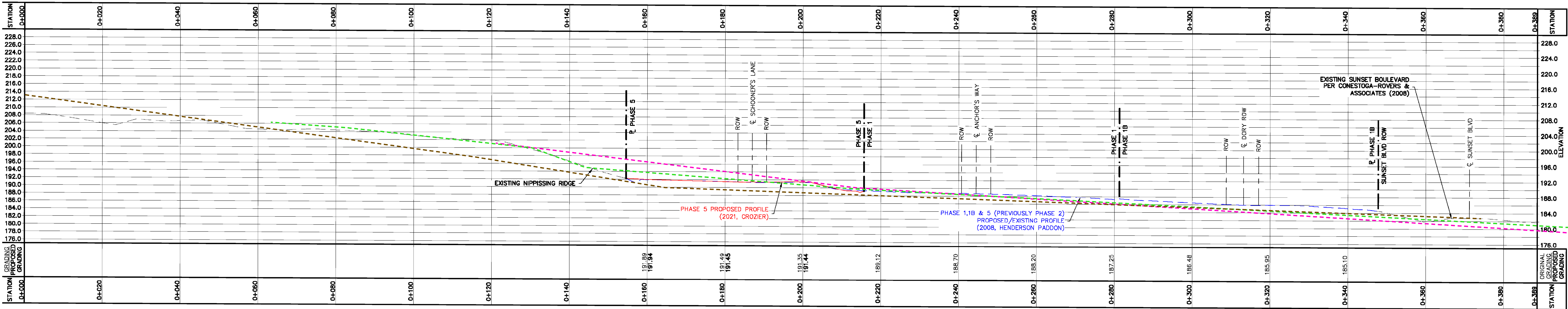
No Signature - Task assigned to Brian Worsley was completed by delegate Nathan Westendorp

Brian Worsley - Sep 17, 2021 - 2:43 PM

Nathan Westendorp - Sep 17, 2021 - 2:44 PM

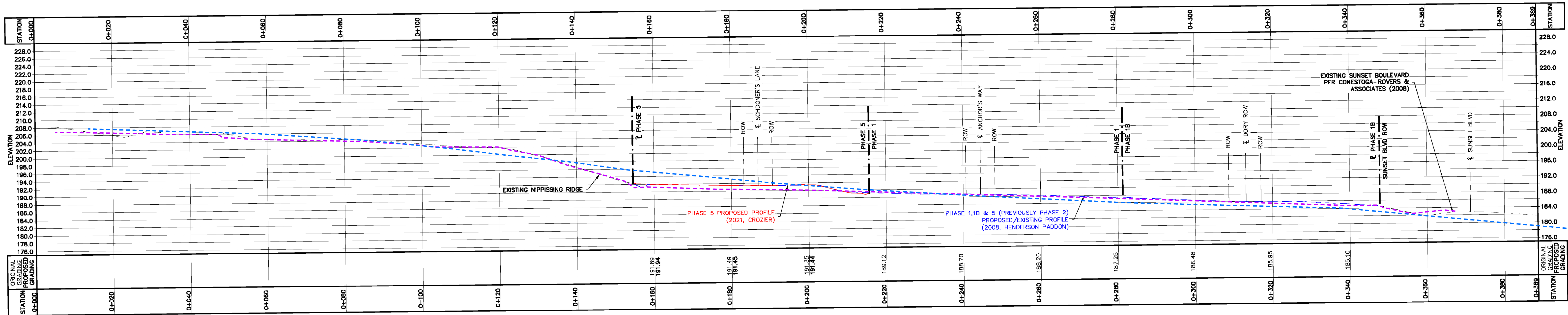
1944 to 1989

- 25ft 1944 Topo
- 5m 2015 MNR
- 10m 1989 Topo



2015 and 2019

- 2m 2015 DEM
- 50cm 2019 LIDAR



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THIS IS NOT A PLAN OF SURVEY.

SANITARY STRUCTURES

SAMH103
STA 7+018.50
T/G = 190.33
1200# OPSD-701.010,
F&G, OPSD-401.010, TYPE 'A'
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@ INV NW (150#) = 187.71
@ INV SW (135#) = 187.73

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@ INV NE (200#) = 187.19
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T/G = 190.85
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@ INV SE (200#) = 187.59

SAMH106
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T/G = 191.51
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@ INV SE (200#) = 188.48

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STORMWATER STRUCTURES

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F&G, OPSD-400.020
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F&G, OPSD-400.020
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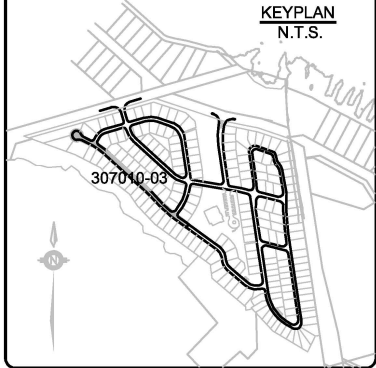
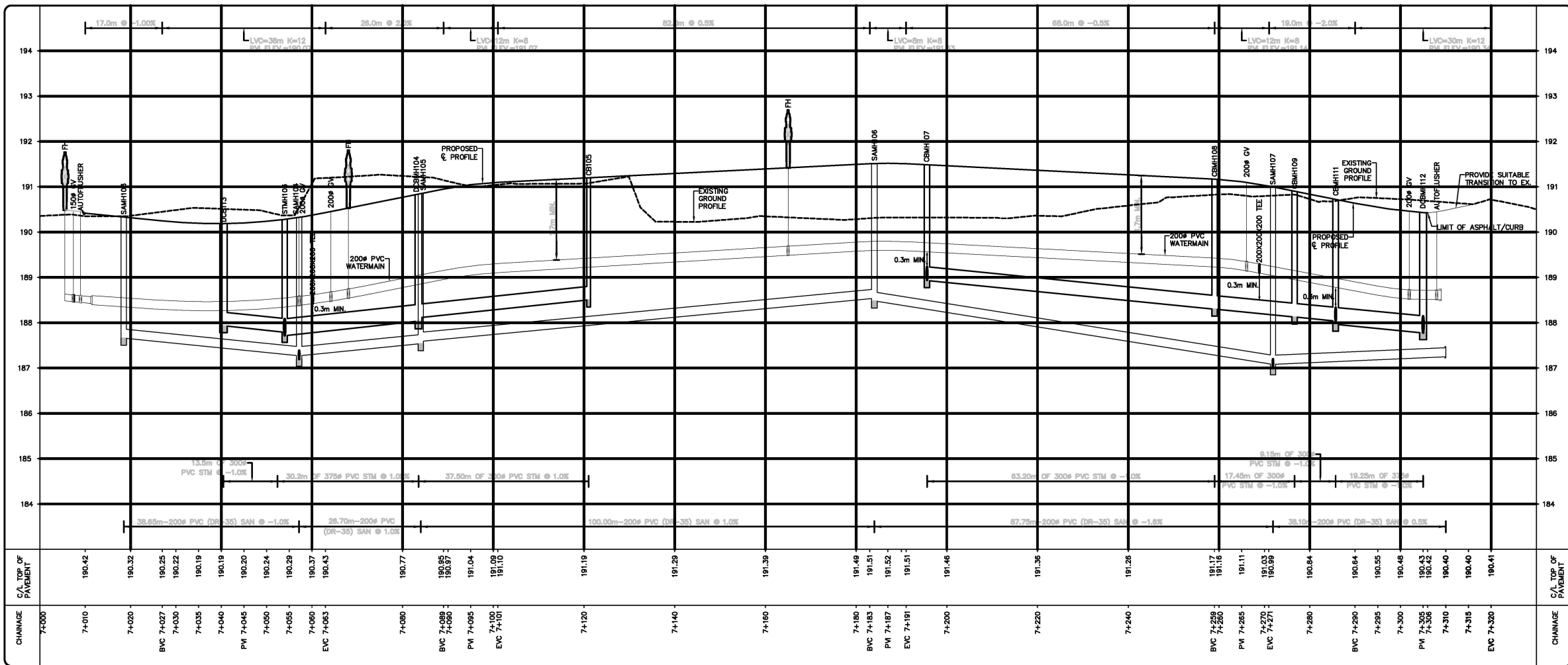
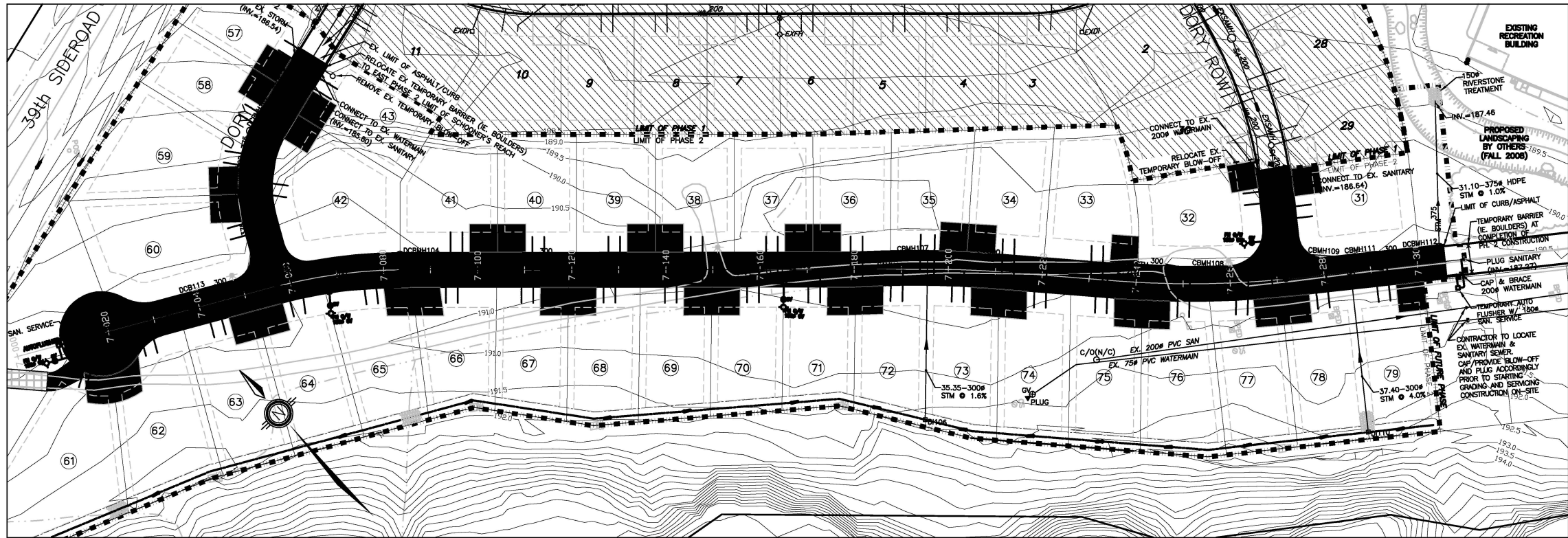
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-ALL SANITARY LATERALS 135# PVC (DR28)
UNLESS NOTED OTHERWISE
-ALL WATER SERVICES 19# PE SERVICE TUBING (160 PSI)
UNLESS NOTED OTHERWISE
-MIN HORIZONTAL PIPE CLEARANCE BETWEEN WM & SAN/STM IS 2.5m

BENCHMARK: 3
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ROTORDISK PUMPING CHAMBER LOCATED ON THE NORTH SIDE OF
SUNSET BLVD. EL. 181.264

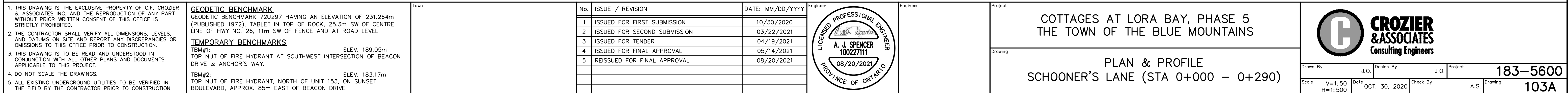
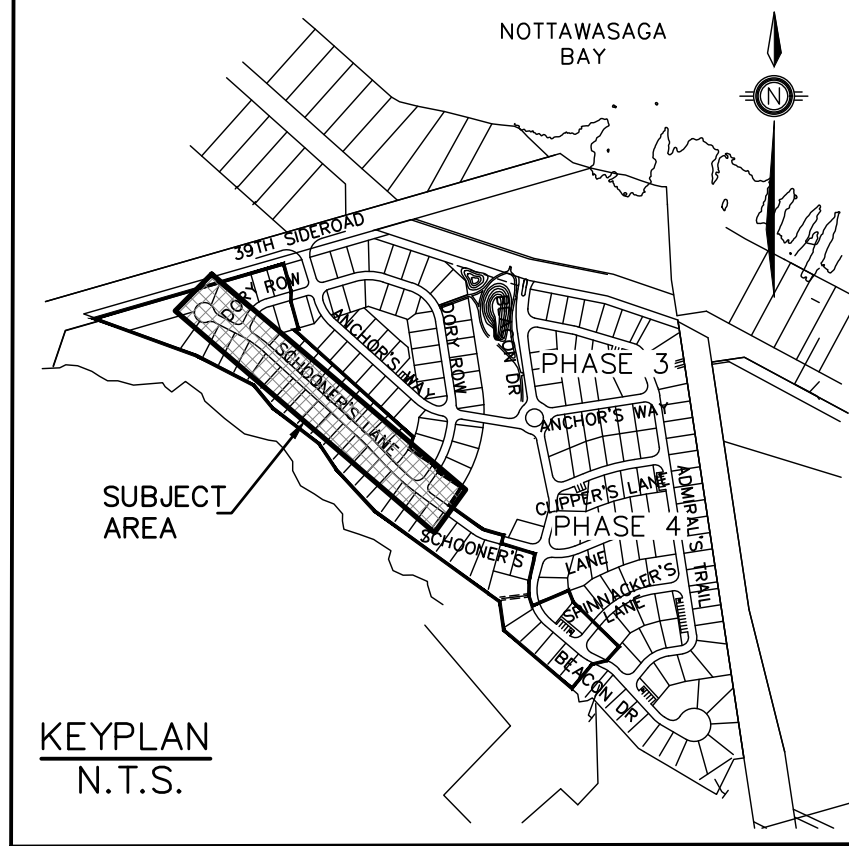
CAUTION:
THE POSITION OF POLE LINES, CONDUITS, WATERMAINS,
SEWERS AND OTHER UNDERGROUND AND OVERGROUND
UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON
THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE
ACCURACY OF THE POSITION OF SUCH UTILITIES AND
STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK,
THE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

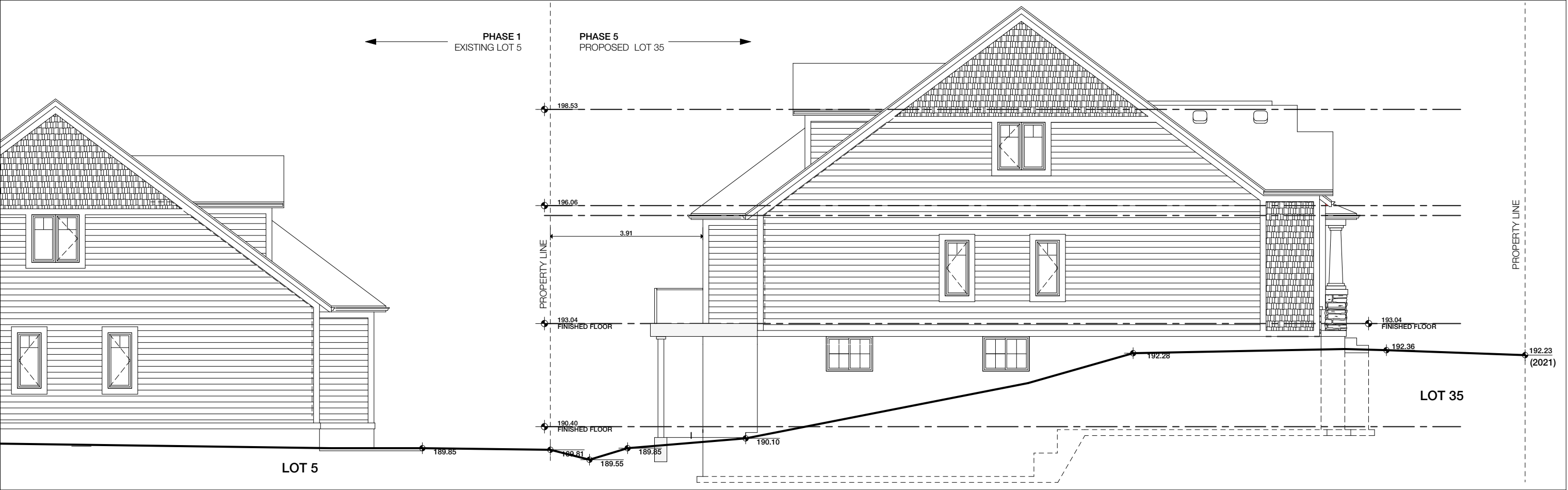
DATE	REVISION / ISSUE
FEB 26/09	SUBMITTED FOR "ACCEPTED FOR CONSTRUCTION"
SEPT 03/08	SUBMITTED FOR TOWN APPROVAL
APR 04/08	SUBMITTED FOR TOWN APPROVAL
	DESCRIPTION
	Seal not valid unless signed and dated

HENDERSON, PADDON
& ASSOCIATES LIMITED
CONSULTING ENGINEERS
OWEN SOUND • THE BLUE MOUNTAINS
PHONE (519) 599-3793 SINCE 1972

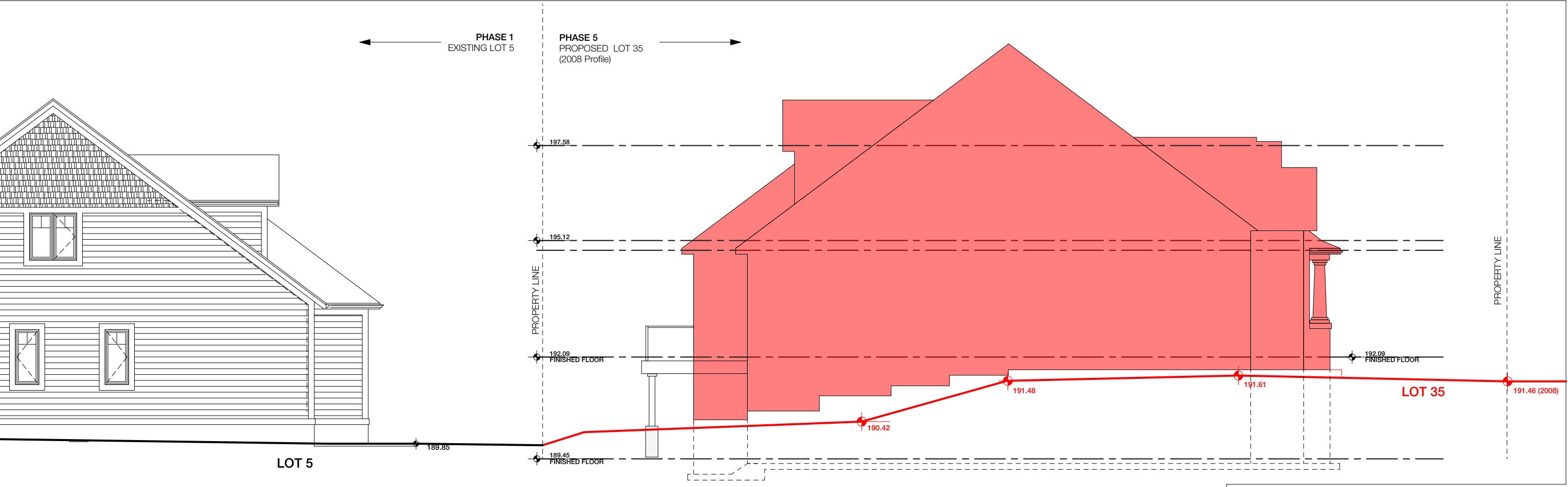
TITLE:
SCHOONER'S REACH
PHASE 2 RESIDENTIAL
PLAN AND PROFILE
STATION 7+000.00 TO STATION 7+320.00

Client:	THE VILLAGE OF KEEPER'S COVE
Design:	DMR
Drawn:	BRG
Checked:	DMR
Date:	FEB/08
Drawing No.	307010-03





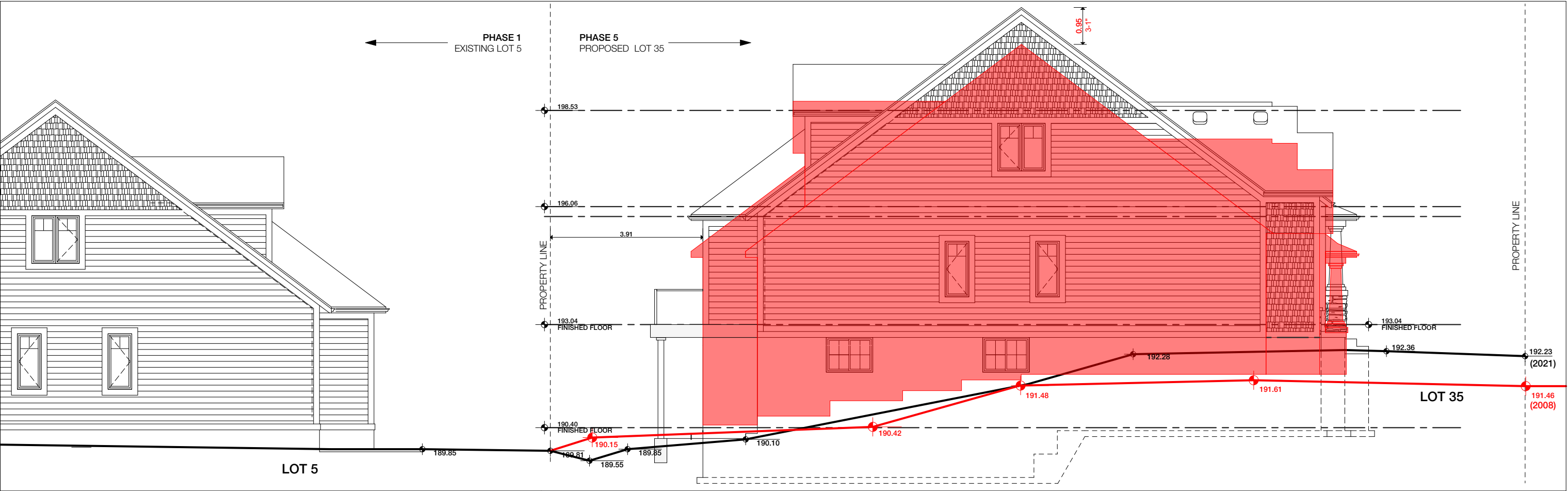
Profile and Side Elevation: Existing Phase 1 – Lot 5 and Proposed Phase 5 – Lot 35 (2021)



Profile and Side Elevation: Existing Phase 1 – Lot 5 (black) and Proposed Phase 5 – Lot 35 - 2008 (red)

symbolics architecture + design
181 Carlaw Avenue. Suite 201. Toronto . On . M4M 2S1 . Ph: 416.486.8171

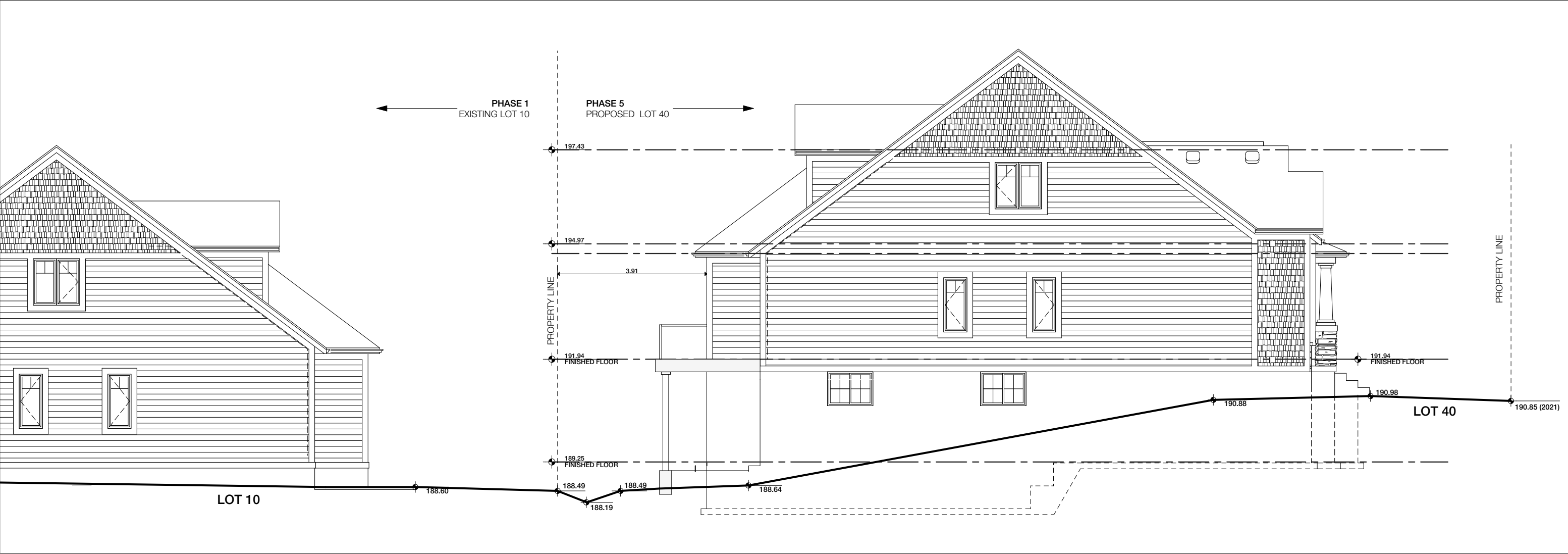
A-02 | LOT 35 - 2008 & 2021 Profile



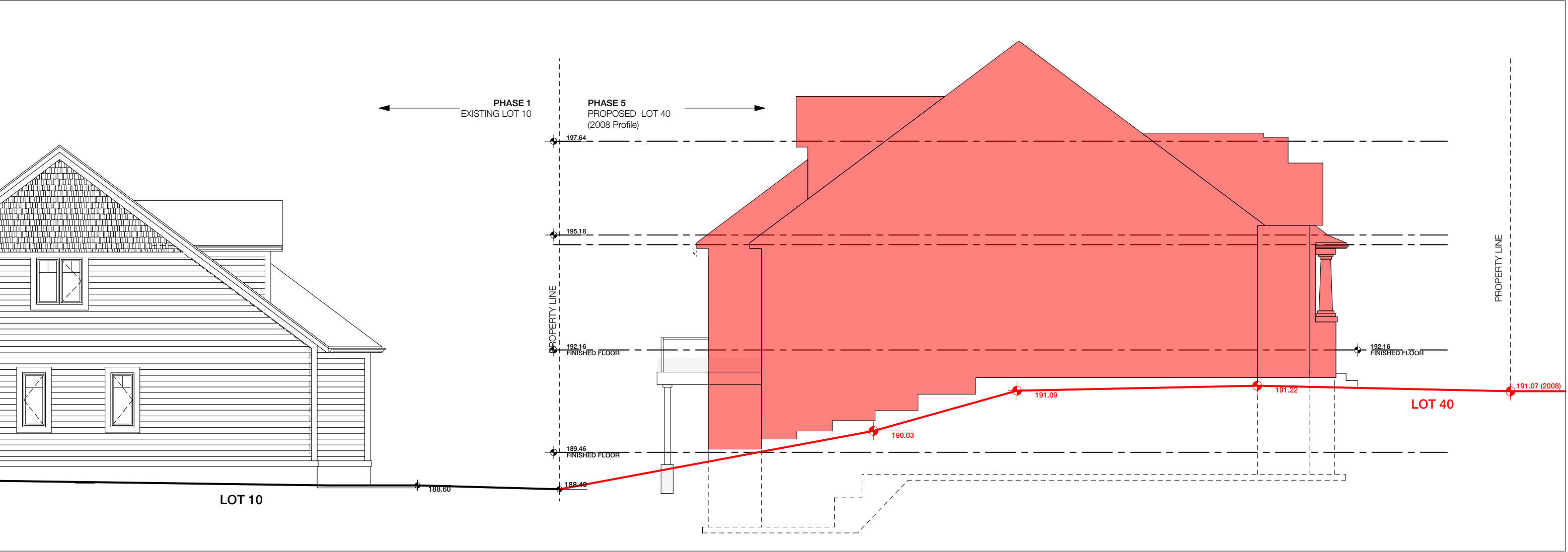
Profile and Side Elevation: Existing Phase 1 – Lot 5 (black) and Proposed Phase 5 – Lot 35 (2021 (black) & 2008 (red))

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A-04 | LOT 40 - 2021 Profile

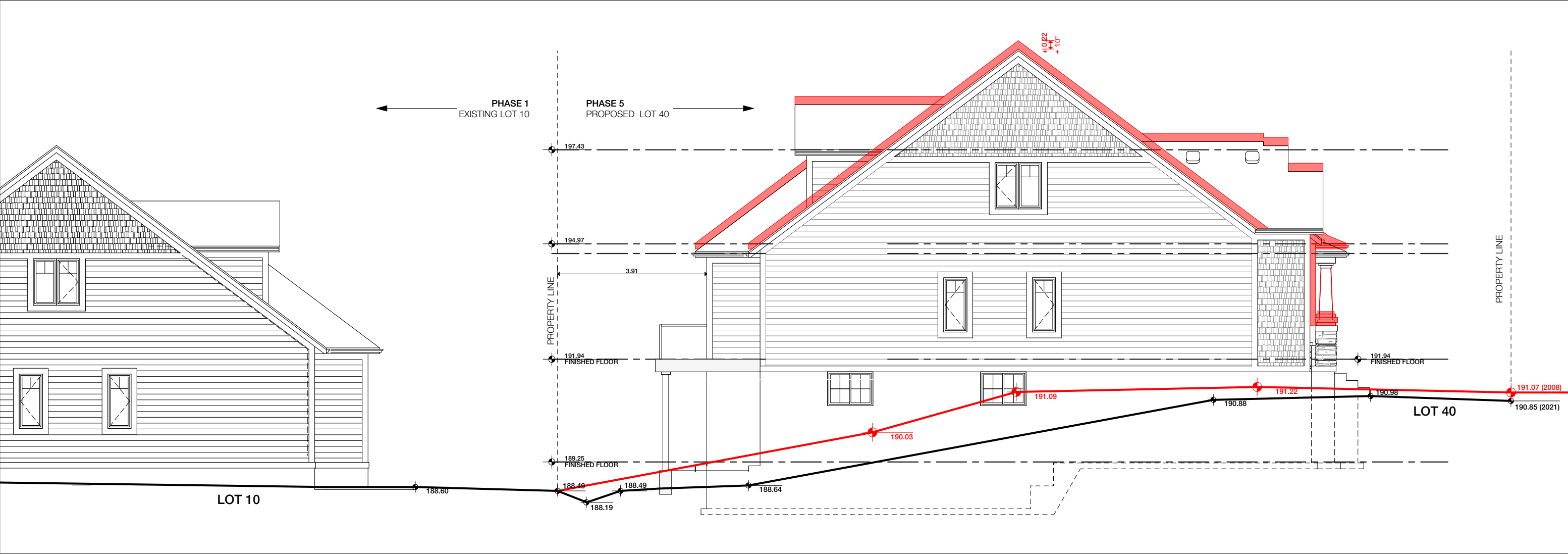


Profile and Side Elevation: Existing Phase 1 – Lot 10 and Proposed Phase 5 – Lot 40 (2021)



Profile and Side Elevation: Existing Phase 1 – Lot 10 (black) and Proposed Phase 5 – Lot 40 - 2008 (red)

A-05 | LOT 40 - 2008 & 2021 Profile



Profile and Side Elevation: Existing Phase 1 – Lot 10 (black) and Proposed Phase 5 – Lot 40 (2021 (black) & 2008 (red))