

Geotechnical Brief

For
65 Stewart Street, Ottawa

Prepared by:

W.Elias & Associates
204 Borealis Cres . Ottawa, ON K11 4V1
Mobile | 613.762.7800
EMAIL: wissamelias@gmail.com



Revision 0
August, 2020

Introduction:

The property at 65 Stewart Street is located close to the intersection of Stewart Street and Cumberland Street. The property is about 0.04 acres built in circa 1910.

This report provides the results of a brief geotechnical investigation at the above noted site. Brief geotechnical investigation for this development was permitted based on email confirmation from City of Ottawa official, see correspondents in appendix.

This Geotechnical briefing prepared based on the site investigation/observations and factual information obtained from geotechnical reports of other properties in the immediate vicinity. This report presents the findings and provides guidelines on the geotechnical engineering aspects of the project design, including construction considerations, which could influence design decisions.



Background Information :

Based on subsurface information contained on surficial geology mapping and knowledge of the subsurface soil conditions in the vicinity of the project site it was considered that generally, the subsurface profile encountered at the test pit location consists of a layer of granular fill overlying a compact, brown, silty sand. Based on available geological mapping, bedrock in this area consists of interbedded limestone and shale from the Verulam formation. Bedrock is expected to range between 5 to 10 m depth.

Geotechnical reports of properties in the vicinity of proposed development revealed that long-term groundwater level is expected to be greater than 3 m. Groundwater levels are subject to seasonal fluctuations and therefore, the groundwater levels could vary at the time of construction.

Procedure of Limited investigation:

The fieldwork for the geotechnical assessment was conducted and supervised throughout by a member of our engineering staff who located the test pits in the field, logged the test pits and cared for the samples obtained, on August 4, 2020. At that time, two test holes (HA 1 and HA 2) were made through the basement floor slab of the existing house at 65 Stewart Street. Hand auger holes were advanced below the test pit bottoms to depths of up to 1.09 m below the current basement floor surface. A description of the subsurface conditions encountered at the two test pits are given in the attached Record of Test Pit Sheets.

Assessment To The Existing Building Foundation

The existing building is constructed on stone foundation. Visual inspection was performed during site visit and no sign of settlement was noted on the entire existing building foundation.

Subsurface Conditions - General

The subsurface conditions observed at the test hole locations were recorded in detail in the field. The soil profile encountered at each test hole is presented on the Soil Profile and Test Data sheets attached to this letter. The test hole locations are described on the Soil Profile and Test Data sheets, and are shown on the enclosed Test Hole Location Plan.

At the test holes, a layer of miscellaneous fill material was encountered below the existing thin concrete slab. The fill was found to be underlain by compact to dense light grey silty sand-gravel (glacial till) at a depth of 0.3 to 0.33 m below the basement floor surface. Refusal to hand auger penetration was encountered at depths of 0.84 and 1.09 m below the basement floor slab surface. The refusal to auger penetration may represent a boulder in the soil, or possibly a point on the bedrock surface. The basement floor surface was measured to be approximately 1.6 m below the exterior ground surface.

The soil descriptions in this report are based on commonly accepted methods of classification and identification employed in geotechnical practice. Classification was in general completed by visual-manual procedures in accordance with ASTM 2488 - Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). Classification and identification of soil involves judgement.

Assessment of Subsurface Conditions

It is stressed that the information in the following sections is provided for the guidance of the designers and is intended for this project only. Contractors bidding on or undertaking the works should examine the factual results of the investigation, satisfy themselves as to the adequacy of the information for construction, and make their own interpretation of the factual data as it affects their construction techniques, schedule, safety and equipment capabilities.

The professional services for this project include only the geotechnical aspects of the subsurface conditions at this site.

This section of the report provides engineering guidelines on the geotechnical design aspects of the project based on our interpretation of the information from the test hole and the project requirements.

Foundation Design

Footings placed on an undisturbed, compact silty sand bearing surface can be designed using a bearing resistance value at SLS of 100 kPa and a factored bearing resistance value at ULS of 150 kPa. A geotechnical resistance factor of 0.5 was applied to the bearing resistance values at ULS. These numbers are also confirmed with geotechnical reports of other properties in the immediate vicinity.

Design for Earthquakes

The site class for seismic site response can be taken as Class C for foundations constructed at the subject site. Refer to the latest revision of the 2012 Ontario Building Code for a full discussion of the earthquake design requirements. The soils underlying the subject site are not susceptible to liquefaction.

Frost Action Protection

Perimeter footings of heated structures are required to be insulated against the effect of frost action. A minimum of 1.5 m thick soil cover (or equivalent) should be provided.

Excavation

The excavation side slopes above the groundwater level extending to a maximum depth of 3 m should be excavated at 1H:1V or shallower. The shallower slope is required for excavation below groundwater level. The subsurface soil is considered to be mainly Type 2 and 3 soil according to the Occupational Health and Safety Act and Regulations for Construction Projects.

Excavated soil should not be stockpiled directly at the top of excavations and heavy equipment should maintain a safe working distance from the excavation sides. Slopes in excess of 3 m in height should be periodically inspected by the consultant in order to detect if the slopes are exhibiting signs of distress.

Underpinning Recommendation

Should the developer wish to lower the basement level, it is recommended that the underpinning be carried out on a 3 stage interval method. Each interval shall not exceed 4 feet in length.

Construction Recommendations

The engagement of the services of the geotechnical consultant during construction is recommended to confirm that the subsurface conditions throughout the proposed construction do not materially

differ from those given in this letter and that the construction activities do not adversely affect the intent of the design.

All foundation areas and any engineered fill areas for the proposed building should be inspected by W. Elias & Associates Inc. to ensure that a suitable subgrade has been reached and properly prepared. The placing and compaction of any granular materials beneath the foundations should be inspected to ensure that the materials used conform to the grading and compaction specifications.

Should you have any questions or comments, please feel free to contact undersigned.



Yours truly,
Wissam Elias, P. Eng
Senior Project Manager

SOIL DESCRIPTION		STRATA PLOT	SAMPLE				DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone				Piezometer Construction
			TYPE	NUMBER	% RECOVERY	N VALUE or RQD			○ Water Content %				
								20	40	60	80		
Basement Floor Slab							0						
Concrete floor slab		0.05					0	56.90					
FILL: Loose, black mixture of rock and brick pieces, silty sand, organics		0.33											
Dense, light olive SILTY SAND-GRAVEL with boulders		0.84											
End of Hand Auger Hole													
Practical hand auger refusal at 0.84m depth (HA dry upon completion)													
								20	40	60	80	100	
								Shear Strength (kPa)					
								▲ Undisturbed △ Remoulded					



W. Elias & Associates Consulting Engineers
 204 Borealis Cres. Ottawa, ON K1V 4V1
 Mobile | 613.762.7800
 EMAIL: wissam Elias@gmail.com

SOIL PROFILE AND TEST DATA

Assessment of Foundation Soils
 65 Stewart Street, Ottawa, Ontario


DATUM Elevations inferred from topographic survey plan.

Date: August 04, 2020

REMARKS Located southeast corner of basement.

HOLE NO. HA 1

BORINGS BY Hand Auger

 W. Elias & Associates Consulting Engineers 204 Borealis Cres. Ottawa, ON K1H 4V1 Mobile 613.762.7800 EMAIL: wissamellas@gmail.com		SOIL PROFILE AND TEST DATA											
		Assessment of Foundation Soils 65 Stewart Street, Ottawa, Ontario											
DATUM Elevations inferred from topographic survey plan.				Date: August 04, 2020									
REMARKS Located northwest corner of basement.				HOLE NO. HA 2									
BORINGS BY Hand Auger													
SOIL DESCRIPTION	STRATA PLOT	SAMPLE				DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone				Piezometer Construction	
		TYPE	NUMBER	% RECOVERY	N VALUE or RQD			○ Water Content %					
Basement Floor Slab													
Concrete floor slab	0.05					0	56.90						
FILL: Black mixture of rock pieces, silty sand, gravel, organic clumps	0.30												
Compact to dense, light olive SILTY SAND-GRAVEL with cobbles													
End of Hand Auger Hole	1.09					1	55.90						
Practical hand auger refusal at 1.09m depth. (GWL @ 0.3m depth)													
								20	40	60	80	100	
								Shear Strength (kPa) ▲ Undisturbed △ Remoulded					

APPENDIX A:
Related Correspondence

From: **Wessel, Shawn** <shawn.wessel@ottawa.ca>
Date: Wed, Jul 15, 2020 at 10:52 AM
Subject: RE: 65 Stewart St- Preconsultation Follow up Comments and Submission List - PC2020-0144
To: Sam Elias <wissamelias@gmail.com>
Cc: Deiaco, Simon <Simon.Delaco@ottawa.ca>

Good morning Mr. Elias.

The geotechnical study is essential to ensure this addition is bearing on sound soil strata and to ensure that the appropriate bearing pressures, footing types and sizes are used, particularly mating an addition to the existing structure and also ensuring existing footing drains (if existing) are connected appropriately.

I will accept a brief from the geotechnical consultant in the event that they can demonstrate that there are no issues with the current building (example - need for underpinning due to sinking of any part of the existing building, or the like etc.) and that have the appropriate information to determine an adequate footing/foundation type for the design for this project.

The consultant will also need to cite sound engineering recommendations based on geotechnical reports from other properties in the immediate vicinity that can adequately provide an appropriate representation of the soil strata and/or soil issues/irregularities within the site area.

In addition to above, the owner is to acknowledge and agree that this deviation from standard procedure is at their own risk and in the event that this project is subject to any issues and/or damage due to proven geotechnical complications, the City will not be held legally nor financially accountable for any of said complications/issues/damage. Furthermore, the City will not be held responsible for any costs associated to repairs/replacement of said damaged property. Please also note that agreeance to the above is considered to be legally binding.

If you require additional information or clarification, please do not hesitate to contact me anytime.

Thank you

Regards,

Shawn Wessel, A.Sc.T.,rcji
Project Manager - Infrastructure Approvals
Gestionnaire de projet – Approbation des demandes d'infrastructures

Development Review Central Branch | Direction de l'examen des projets d'aménagement, Centrale
Planning, Infrastructure and Economic Development Department | Direction générale de la planification
de l'infrastructure et du développement économique
City of Ottawa | Ville d'Ottawa
110 Laurier Ave. W. | 110, avenue Laurier Ouest, Ottawa ON K1P 1J1
(613) 580 2424 Ext. | Poste 33017
Int. Mail Code | Code de Courrier Interne 01-14
shawn.wessel@ottawa.ca

 Please consider the environment before printing this email

From: Sam Elias <wissamelias@gmail.com>
Sent: July 15, 2020 8:00 AM
To: Wessel, Shawn <shawn.wessel@ottawa.ca>
Cc: Deiaco, Simon <Simon.Delaco@ottawa.ca>
Subject: Fwd: 65 Stewart St- Preconsultation Follow up Comments and Submission List - PC2020-0144

CAUTION: This email originated from an External Sender. Please do not click links or open attachments unless you recognize the source.

ATTENTION : Ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.

Hi Shawn,

Thanks for your time for your input in the submission list. I would like to discuss the requirements of the Geotechnical report. In fact the addition which is the purpose of this development has a relatively small footprint and only 2 to 3 stories height . We believe that the request for a full extent geotechnical report is excessive for this development application. We would like to have your blessing support on providing a geotechnical brief for the purpose of this development.

Your time and concern is highly appreciated.

Sam Elias, P. Eng



204 BOREALIS Cresc, Ottawa, ON K1K 4V1
wissamelias@gmail.com | T 613 762-7800

July 8, 2020

Pre-Consul Meeting Notes to the File Lead - Simon Deiacco
Re: 65 Stewart (PC2020-0144)
Ward 12 - Rideau-Vanier, Councillor Mathieu Fleury

For **Zoning applications**, please provide Adequacy of Servicing for the site, demonstrating that the site can be appropriately serviced and is able to achieve SWM requirements, as per City Guidelines as well as City Policies, Standard Detail Drawings and By-Laws as well as environmental and geotechnical reports as applicable and note the following:

Infrastructure:

A 203 mm dia. PVC Watermain (c. 1999) is available.

A 250 mm dia. PVC Sanitary Sewer (c. 1999) is available, which drains to King Edward Trunk and conveys effluent to the Interceptor Sewer.

A 375 mm dia. PVC Storm Sewer (c. 1999) is available, which drains to Storm Trunks on Cumberland St. and King Edward Avenue then outlets to the Ottawa River at rear of 100 Sussex Dr.

The following apply to this site within a separated sewer area:

- Total allowable release rate will be **2-year pre-development** due to being within Vanier Area and where pipe size is less than 450mm dia. Vanier Area is considered a partially separated sewer area.
- Coefficient (C) of runoff will need to be determined **as per existing conditions** but in no case more than 0.5
- TC = 20 minutes max. or can be calculated
TC should be not be less than 10 minutes, since IDF curves become unrealistic at less than 10 min.
- Any storm events greater than 5 year, up to 100 year, and including 100-year storm event **must be detained on site.**
- Two separate sewer laterals (one for sanitary and other for storm) will be required.

Please note:

Foundation drains are to be independently connected to sewermain (separated or combined) unless being pumped with appropriate back up power, sufficient sized pump and back flow prevention.

Roof drains are to be connected downstream of any incorporated ICD within the SWM system.

- Provide Roof plan showing roof drain and scupper locations, flow rates, drain type and weir opening if controlled. Provide Manufacturer Specifications on drains and also provide 5- and 100-year ponding limits on plan.
- Boundary Conditions will be provided at request of consultant after providing Average Daily Demands, Peak Hour Demands & Max Day + Fire Flow Demands
- If window wells are proposed, they are to be indirectly connected to the footing drains.
- A detail of window well with indirect connection is required, as is a note at window well location speaking to indirect connection.
- Existing buildings require a CCTV inspection and report to ensure existing services to be re-used are in good working order and meet current minimum size requirements. Located services to be placed on site servicing plans.



CCTV Scan
Guideline.pdf

Other:

- Environmental Noise Study is required due to within 100m proximity of King Edward Avenue.
- Stationary Noise Study – consultant to speak to this in their report as per City NCG and NPC 300 Guidelines. May be required after Mechanical Design completed and prior to building permit issuance.
- No Capital Projects listed in the area on GeoOttawa or Envista.
- Water Supply Redundancy – Fire Flow:

Applicant to ensure that a second service with an inline valve chamber be provided where the average daily demand exceeds 50 m³ / day (0.5787 l/s per day)

FUS Fire Flow Criteria to be used unless a low-rise building, where OBC requirements may be applicable.

Source Protection Policy Screening (SPPS):

- SPPS will be provided to applicant by City Risk Mgmt. Officer within Asset Mgmt. Dept.
- Applicant to contact Rideau Valley Conservation Authority (RVCA) for possible restrictions due to quality control. Provide correspondence in Report.

Where underground storage (UG) and surface ponding are being considered:

- Show all ponding for 5- and 100-year events
- Above and below ground storage is permitted although uses $\frac{1}{2}$ Peak Flow Rate or is modeled. Please confirm that this has been accounted for and/or revise.

Rationale:

- The Modified Rational Method for storage computation in the Sewer Design Guidelines was originally intended to be used for above ground storage (i.e. parking lot) where the change in head over the orifice varied from 1.5 m to 1.2 m (assuming a 1.2 m deep CB and a max ponding depth of 0.3 m). This change in head was small and hence the release rate fluctuated little, therefore there was no need to use an average release rate.
- When underground storage is used, the release rate fluctuates from a maximum peak flow based on maximum head down to a release rate of zero. This difference is large and has a significant impact on storage requirements. We therefore require that an average release rate be used to estimate the required volume. Alternatively, the consultant may choose to use a submersible pump in the design to ensure a constant release rate.
- In the event that there is a disagreement from the designer regarding the required storage, The City will require that the designer demonstrate their rationale utilizing dynamic modelling, that will then be reviewed by City modellers in the Water Resources Group.
- Note that the above will added to upcoming revised Sewer Design Guidelines to account for underground storage, which is now widely used.
- Further to above, what will be the actual underground storage provided during the major (100 year) and minor (2 year) storm events?

- Please provide information on UG storage pipe. Provide required cover over pipe and details, chart of storage values, capacity etc. How will this pipe be cleaned of sediment and debris?
- Note - There must be at least 15cm of vertical clearance between the spill elevation and the ground elevation at the building envelope that is in proximity of the flow route or ponding area. The exception in this case would be at reverse sloped loading dock locations. At these locations, a minimum of 15cm of vertical clearance must be provided below loading dock openings. Ensure to provide discussion in report and ensure grading plan matches if applicable.
- Provide information on type of underground storage system including product name and model, number of chambers, chamber configuration, confirm invert of chamber system, top of chamber system, required cover over system and details, interior bottom slope (for self-cleansing), chart of storage values, length, width and height, capacity, entry ports (maintenance) etc.
- Provide a cross section of underground chamber system showing invert and obvert/top, major and minor HWLs, top of ground, system volume provided during major and minor events. UG storage to provide actual 2- and 100-year event storage requirements.
- In regard to all proposed UG storage, ground water levels (and in particular HGW levels) will need to be reviewed to ensure that the proposed system does not become surcharged and thereby ineffective.
- Modeling can be provided to ensure capacity for both storm and sanitary sewers for the proposed development by City's Water Distribution Dept. – Modeling Group, through PM and upon request.
- For proposed depressed driveways or developments with private lanes, parking areas or with entrances etc. lower than roadway.



S18.pdf



S18.1.pdf

- Rear yard on grade parking to be permeable pavement. Refer to City Standard Detail Drawings SC26 (maintenance/temp parking areas), SC27 or permeable asphalt materials. No gravel or stone dust parking areas permitted.

Note:

“Provided Info to applicant”:

Please be advised that it is the responsibility of the applicant and their representatives/consultants to verify information provided by the City of Ottawa. Please contact City View and Release Info Centre at Ext. 44455

City of Ottawa - Historical Land Use Inventory (HLUI) - Required

Rationale:

The HLUI database is currently undergoing an update. The updated HLUI will include additional sources beyond those included in the current database, making the inclusion of this record search even more important.

Although a municipal historic land use database is not specifically listed as required environmental record in O. Reg 153/04, Schedule D, Part II states the following:

The following are the specific objectives of a records review:

1. To obtain and review records that relate to the Phase I (One) property and to the current and past uses of and activities at or affecting the Phase I (One) property in order to determine if an area of potential environmental concern exists and to interpret any area of potential environmental concern.
2. To obtain and review records that relate to properties in the Phase I (One) study area other than the Phase I (One) property, in order to determine if an area of potential environmental concern exists and to interpret any area of potential environmental concern.

It is therefore reasonable to request that the HLUI search be included in the Phase I ESA to meet the above objectives.

Please submit.

All existing reports and plans will need to be revised if older than 2 years and must reflect current City Standards, Guidelines, By-laws and Policies.

Please refer to City of Ottawa website portal for **“Guide to preparing Studies and Plans”** at <https://ottawa.ca/en/city-hall/planning-and-development/information-developers/development-application-review-process/development-application-submission/guide-preparing-studies-and-plans>.

Please ensure you are using the current guidelines, bylaws and standards including materials of construction, disinfection and all relevant reference to OPSS/D and AWWA guidelines - all current and as amended, such as:

City of Ottawa Sewer Design Guidelines (CoOSDG) complete with ISTDB 2012-01, 2014-01, 2016-01, 2018-01 & 2019-02 technical bulletin updates as well as current Sewer, Landscape & Road Standard Detail Drawings as well as Material Specifications (MS Docs).

Sewer Connection (2003-513) & Sewer Use (2003-514) By-Laws.

City of Ottawa Water Distribution Design Guidelines (CoOWDDG) complete with ISTDB 2010-02, 2014-02 & 2018-02 technical bulletin updates as well as current Watermain/ Services Material Specifications (MS Docs) as well as Water and Road Standard Detail Drawings.

FUS Fire Flow standards

Water (2018-167) By-Law

Ensure to include version date and add “**(as amended)**” when referencing all standards, detail drawings, by-Laws and guidelines.

Fourth (4th) Review Charge:

Please be advised that additional charges for each review, after the 3rd review, will be applicable to each file. There will be no exceptions.

Contact me at 613-580-2424, Ext. # 33017 or e-mail shawn.wessel@ottawa.ca if you have any questions.

Sincerely,



Shawn Wessel, A.Sc.T., rcji
Project Manager
Development Review, Central Branch



APPLICANT'S STUDY AND PLAN IDENTIFICATION LIST

Legend: **S** indicates that the study or plan is required with application submission.
A indicates that the study or plan may be required to satisfy a condition of approval/draft approval.

For information and guidance on preparing required studies and plans refer to:
<http://ottawa.ca/en/development-application-review-process-0/guide-preparing-studies-and-plans>

S/A	Number of copies	ENGINEERING		S/A	Number of copies
S	2	1. Site Servicing Plan	2. Site Servicing Study		
S	2	3. Grade Control and Drainage Plan (can be combined with servicing plan)	4. Geotechnical Study	S	2
		5. Composite Utility Plan	6. Groundwater Impact Study		
		7. Servicing Options Report	8. Wellhead Protection Study		
		9. Transportation Impact Study	10. Erosion and Sediment Control Plan		
		11. Storm water Management Report	12. Hydro geological and Terrain Analysis		
		13. Hydraulic Water main Analysis	14. Noise Study	S	2
		15. Roadway Modification Design Plan	16. Confederation Line Proximity Study		

S/A	Number of copies	PLANNING / DESIGN / SURVEY		S/A	Number of copies
		17. Draft Plan of Subdivision	18. Plan Showing Layout of Parking Garage		
		19. Draft Plan of Condominium	20. Planning Rationale - Cover Letter	S	2
S	2	21. Site Plan	22. Minimum Distance Separation (MDS)		
		23. Concept Plan Showing Proposed Land Uses and Landscaping	24. Agrology and Soil Capability Study		
		25. Concept Plan Showing Ultimate Use of Land	26. Cultural Heritage Impact Statement	A	2
S	2	27. Landscape Plan	28. Archaeological Resource Assessment Requirements: S (site plan) A (subdivision, condo)		
S	2	29. Survey Plan	30. Shadow Analysis		
S	2	31. Architectural Building Elevation Drawings (dimensioned)	32. Design Brief (Includes the Design Review Panel Submission Requirements)	S	2
		33. Wind Analysis (addendum to previous study)	34. Public Consultation Strategy: S (zoning, official plan, subdivision) may be included as part of Planning Rationale		

S/A	Number of copies	ENVIRONMENTAL		S/A	Number of copies
		35. Phase 1 Environmental Site Assessment	36. Impact Assessment of Adjacent Waste Disposal/Former Landfill Site		
		37. Phase 2 Environmental Site Assessment (depends on the outcome of Phase 1)	38. Assessment of Landform Features		
		39. Record of Site Condition	40. Mineral Resource Impact Assessment		
S	2	41. Tree Conservation Report (combine with landscape plan)	42. Environmental Impact Statement / Impact Assessment of Endangered Species		
		43. Mine Hazard Study / Abandoned Pit or Quarry Study	44. Integrated Environmental Review (Draft, as part of Planning Rationale)		

Meeting Date: July 8, 2020
 Application Type: SPC (standard)
 File Lead (Assigned Planner): S. Delacio
 Infrastructure Approvals Project Manager: S. Wessel
 Site Address (Municipal Address): 65 Stewart
 *Preliminary Assessment: 1 2 3 4 5

*One (1) indicates that considerable major revisions are required before a planning application is submitted, while five (5) suggests that proposal appears to meet the City's key land use policies and guidelines. This assessment is purely advisory and does not consider technical aspects of the proposal or in any way guarantee application approval.

It is important to note that the need for additional studies and plans may result during application review. If following the submission of your application, it is determined that material that is not identified in this checklist is required to achieve complete application status, in accordance with the Planning Act and Official Plan requirements, the Planning, Infrastructure and Economic Development Department will notify you of outstanding material required within the required 30 day period. Mandatory pre-application consultation will not shorten the City's standard processing timelines, or guarantee that an application will be approved. It is intended to help educate and inform the applicant about submission requirements as well as municipal processes, policies, and key issues in advance of submitting a formal development application. This list is valid for one year following the meeting date. If the application is not submitted within this timeframe the applicant must again pre-consult with the Planning, Infrastructure and Economic Development Department.

110 Laurier Avenue West, Ottawa ON K1P 1J1 Mail code: 01-14 Visit us: Ottawa.ca/planning
 110, av. Laurier Ouest, Ottawa (Ontario) K1P 1J1 Courier interne : 01-14 Visitez-nous : Ottawa.ca/urbanisme

Last updated March, 2018

APPENDIX B:

References

- City of Ottawa Geotechnical Guidelines
- The Canadian Foundation Engineering Manual, 4th Edition 2013
- Geotechnical Investigation, Prepared by Neil A. Levac Engineering Ltd, Dec 2001, Ref no. 01284
- Geotechnical Investigation, Prepared by Paterson Group Inc., Dated March 2016, File no. PG3778-LET.01
- City of Ottawa Surficial Geology Mapping
- ASTM 2488 - Standard Practice for Description and Identification of Soils

APPENDIX C:

Architectural/Engineering Drawings

65 Stewart St. Zoning: R4T S70
 Ottawa ON K1N6H9 Mature Neighborhood and Heritage Overlays

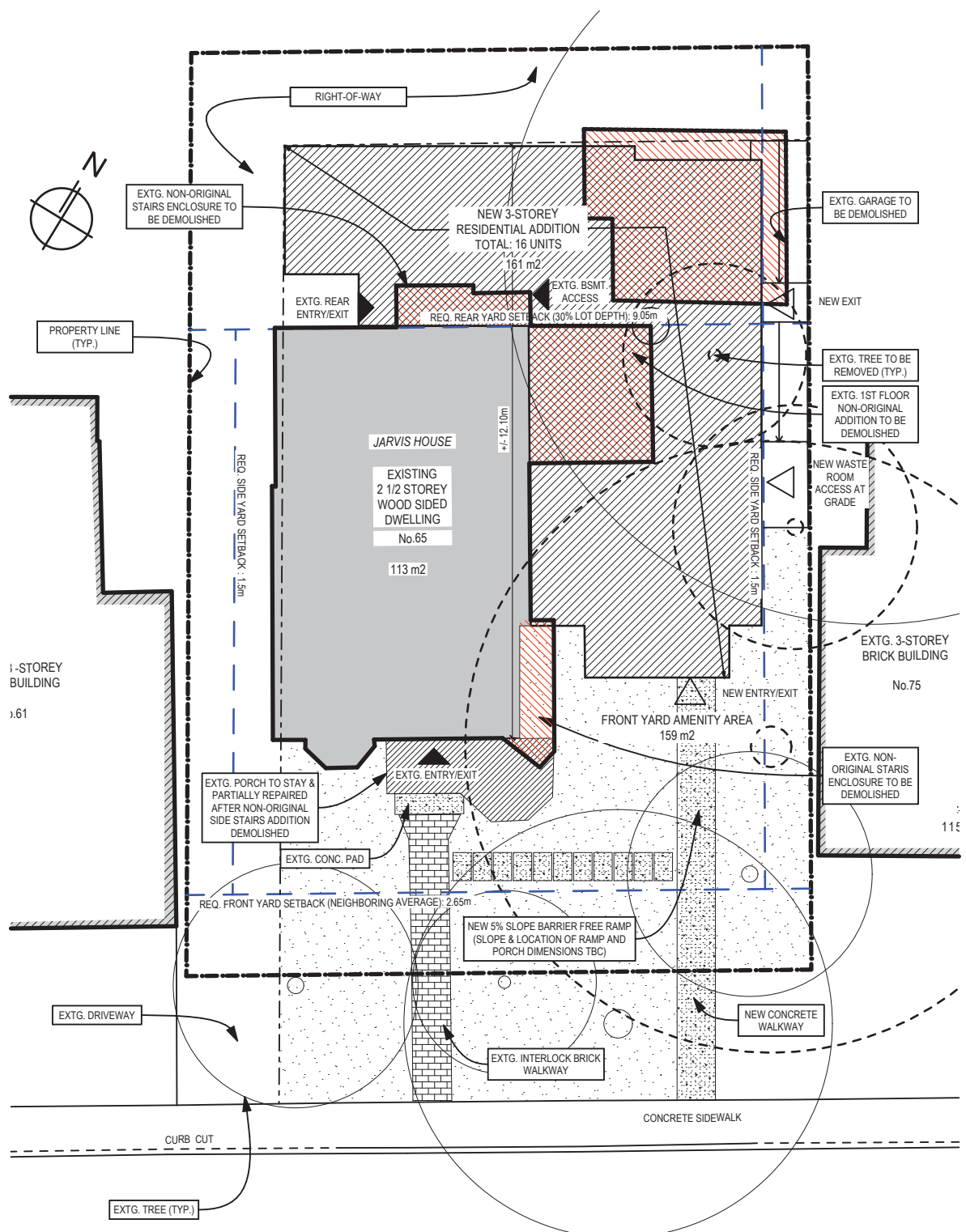
Provision	Requirement	Provided	BY-law	Relief
Min Front Width	15m	20.4m	Table 162A-R4	-
Min Lot Area	450 m ²	612 m ²	Table 162A-R4	-
Min Front Yard Setback	Neighboring average: 2.65 m	Existing : 6.75 m	139(3)(a)(i)	-
Min Interior Side Yard	a) 1.5 m for first 21m and a wall height of 11m. b) 6m in all other circumstances	2.78m (west)+ 1.5 m (east)	Table 162A-R4 Endnote 3	-
Min Rear Yard Setback	30% lot depth including 25% of lot area: 9.05m	3.0 m	161(11)(iii)	✓
Max Height	Backyard (Area D): 10.7 m In all other circumstances (Area A): existing building height, in this case 7.53m	9.635m	Schedule 70	✓
Lanscaped area	30% of the lot area	55% (Hard: 205m ² , Soft: 133m ²)	161(8)	-
Amenity area	15m ² per dwelling unit up to 8 units, plus 6m ² per unit in excess of 8. Total 168 m² Communal amenity area 100% of the amenity area required for the first 8 units. (120 m²) Communal amenity area required for the first 8 units must: -be located at grade and in the rear yard; -be landscaped; -consist of at least 80% (115 m²) soft landscaping; and <u>-be located at grade and in the rear yard and may include one interior yard that abuts both the rear yard and interior side yard, unless the lot has access to a rear lane.</u>	Communal area: 159m ² (Hard: 26 m ² ; Soft: 133 m ²) Balconies, privat patio, porch: 14m ² TOTAL: 173m²	Table 137(3)	- ✓
Bicycle parking	0.5/ unit. In this case 16x0.5=8 spaces Bicycle parking spaces must be located in order to provide convenient access to main entrances or well-used areas.	14	Table 111A(b)(i) 111(4)	- -
Car parking	0.5/uni after first 12 units: 2 spaces required	-	139 (7)(a)	✓
Visitor car parking	Not required (0.1/unit required after first 12 units: 0.4)	-	102(2)	-
Addition	The height of the walls and the height and slope of the roof of the addition do not exceed those of the building	-	60(3)(a)	✓
	The side yard setback of the addition is at least 60 cm. greater than that of the wall of the building located closest to the side lot line	1.5m to side lot line	60(3)(b)(i)	✓
	It is located entirely within the rear yard, or in the interior yard abutting the rear yard and complies with the rear yard setback of the underlying zone	Located in rear yard and interior side yard	60(3)(b)(ii)	✓

2 ZONING MATRIX
 SD00 NOT TO SCALE

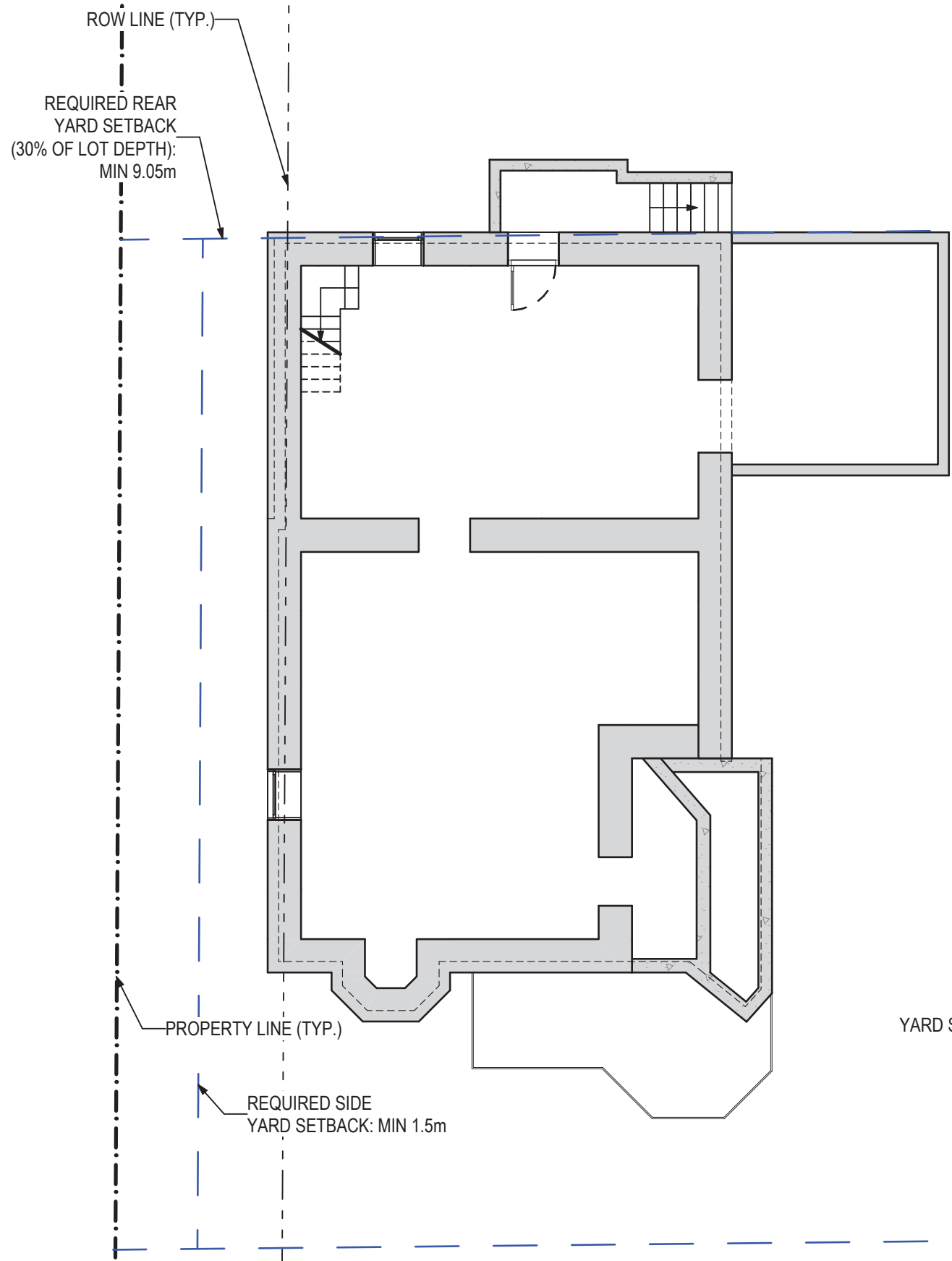


1 CONTEXT MAP
 SD00 NOT TO SCALE

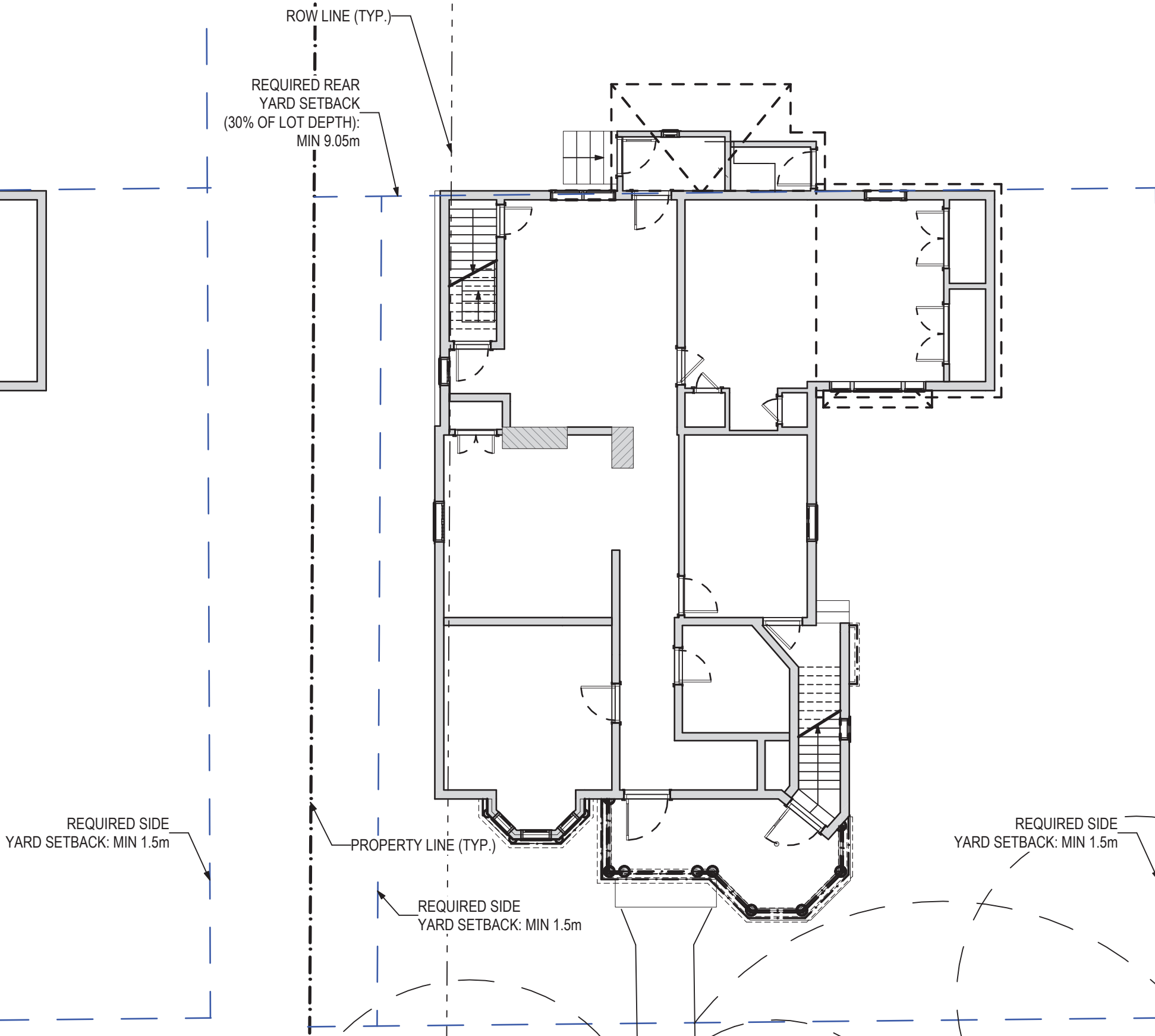
NOTE: SURVEY INFORMATION TAKEN FROM PLAN PREPARED BY ONTARIO LAND SURVEYORS J.D. BARNES LIMITED DATED JULY 23, 2020



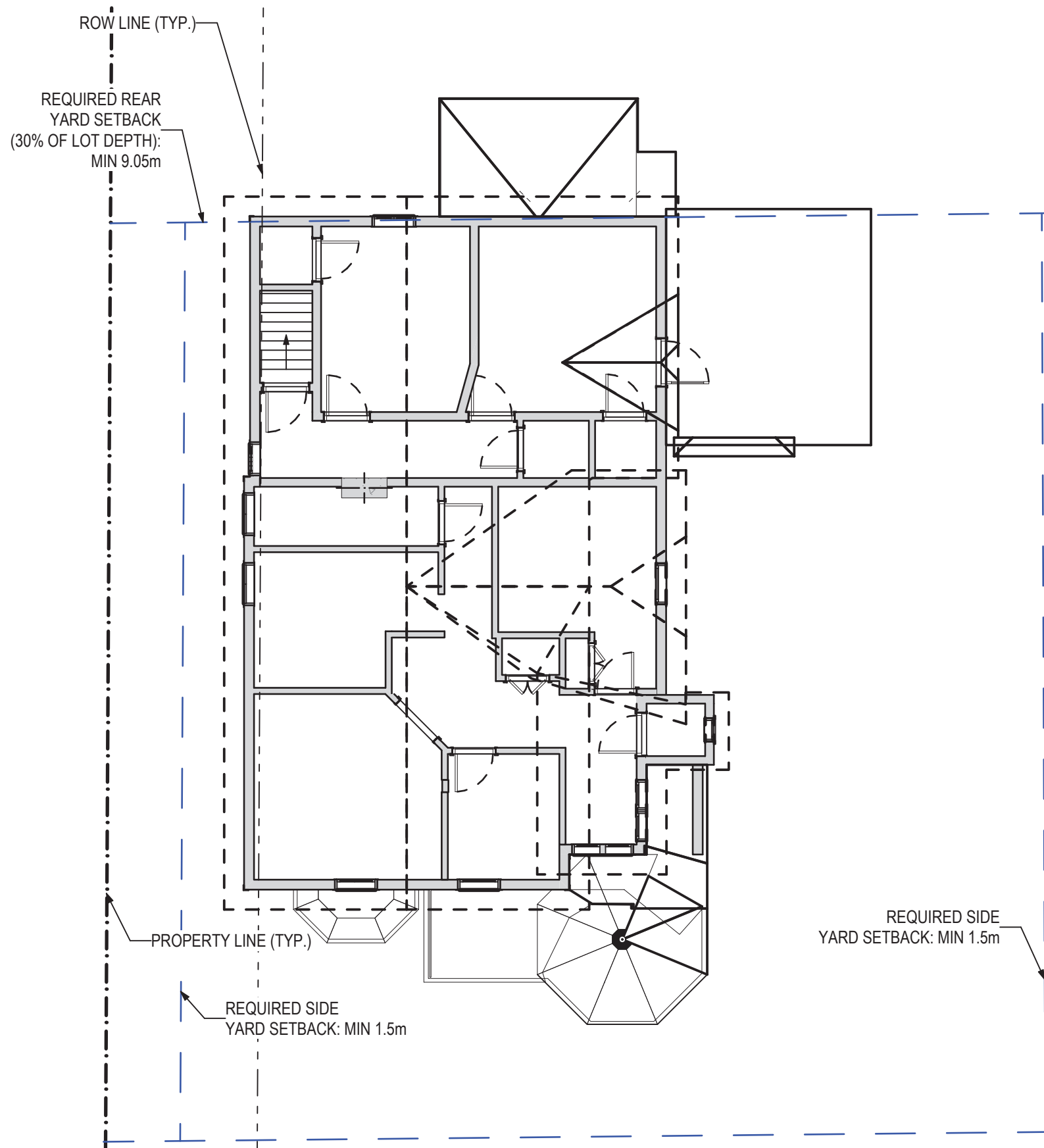
3 SITE PLAN - PROPOSED
 SD00 SCALE: 1:200



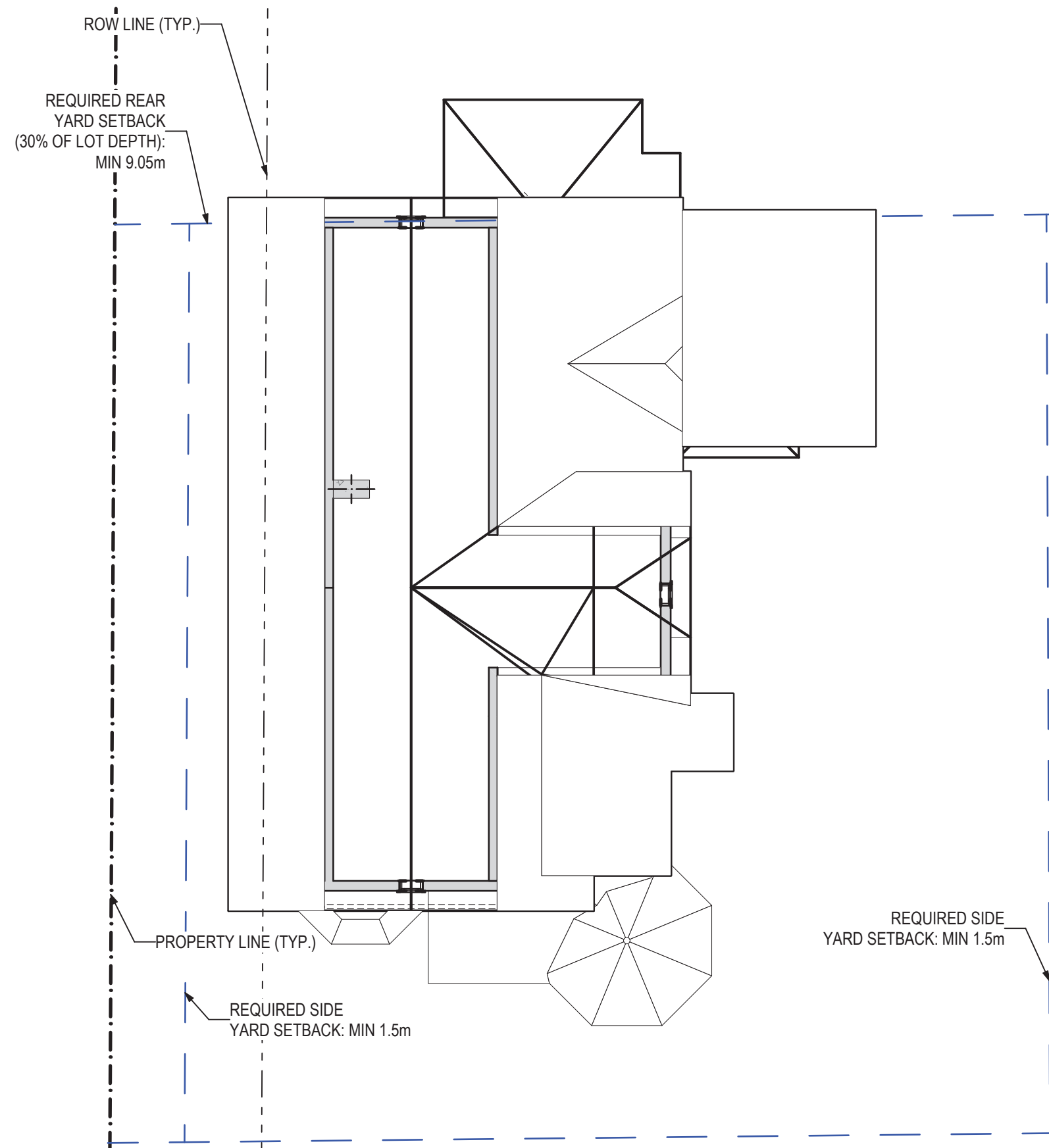
1
SD01
BASEMENT PLAN - EXISTING
SCALE: 1:100



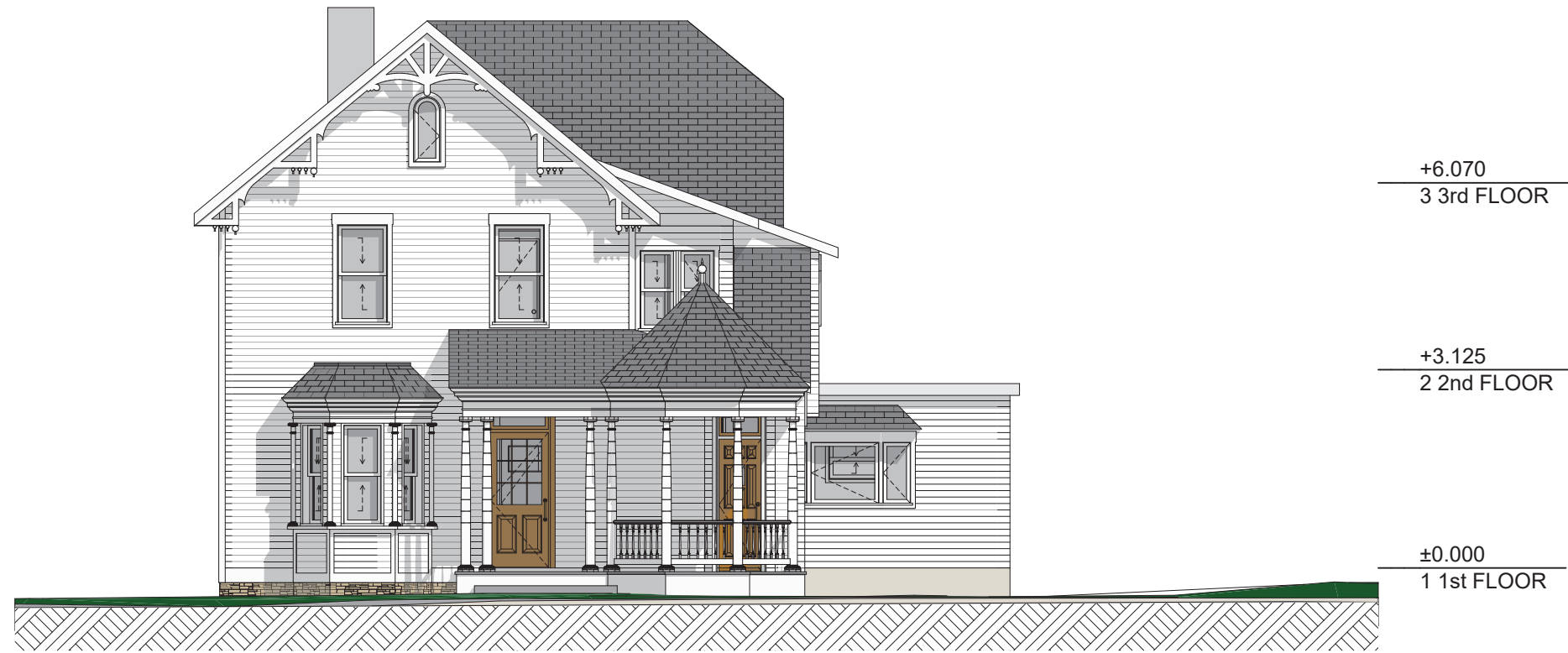
2
SD01
1ST FLOOR PLAN - EXISTING
SCALE: 1:100



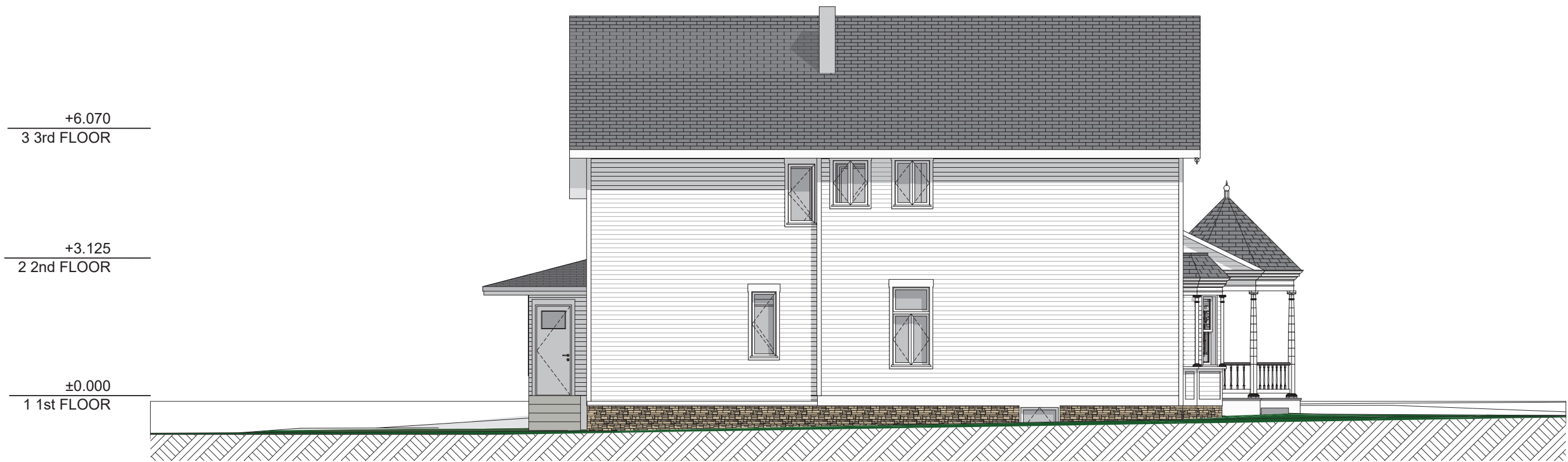
1
SD02 2ND FLOOR PLAN - EXISTING
SCALE: 1:100



2
SD02 ATTIC SPACE - EXISTING
SCALE: 1:100



2 SOUTH ELEVATION - EXISTING
SD03 SCALE: 1:100



1 WEST ELEVATION - EXISTING
SD03 SCALE: 1:100

SOUTH AND WEST ELEVATIONS - EXISTING
JARVIS HOUSE

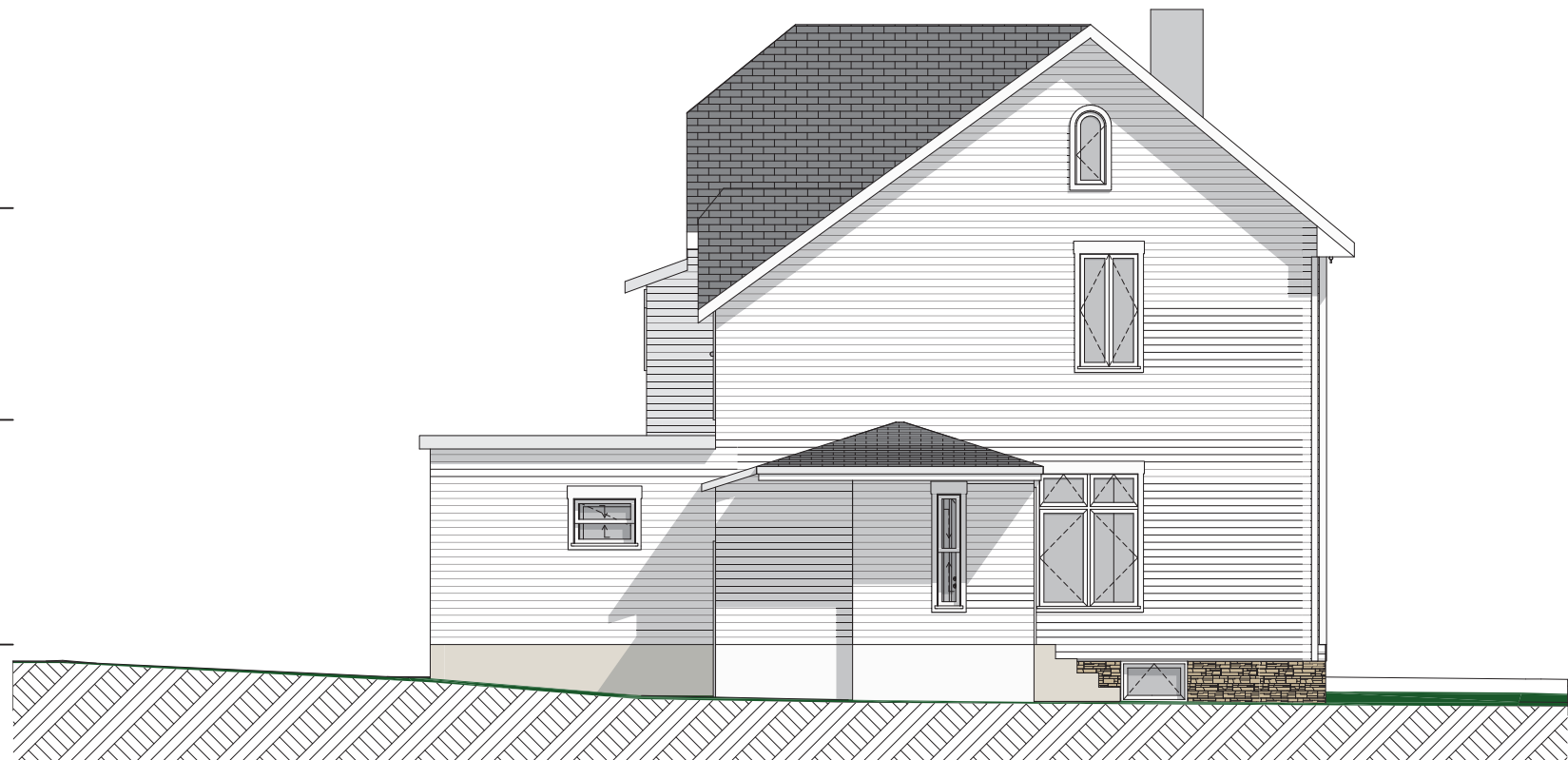
SCALE:
PROJECT No.: 20118

DATE: 10/2/2020
SD03

+6.070
3 3rd FLOOR

+3.125
2 2nd FLOOR

±0.000
1 1st FLOOR



1
SD04

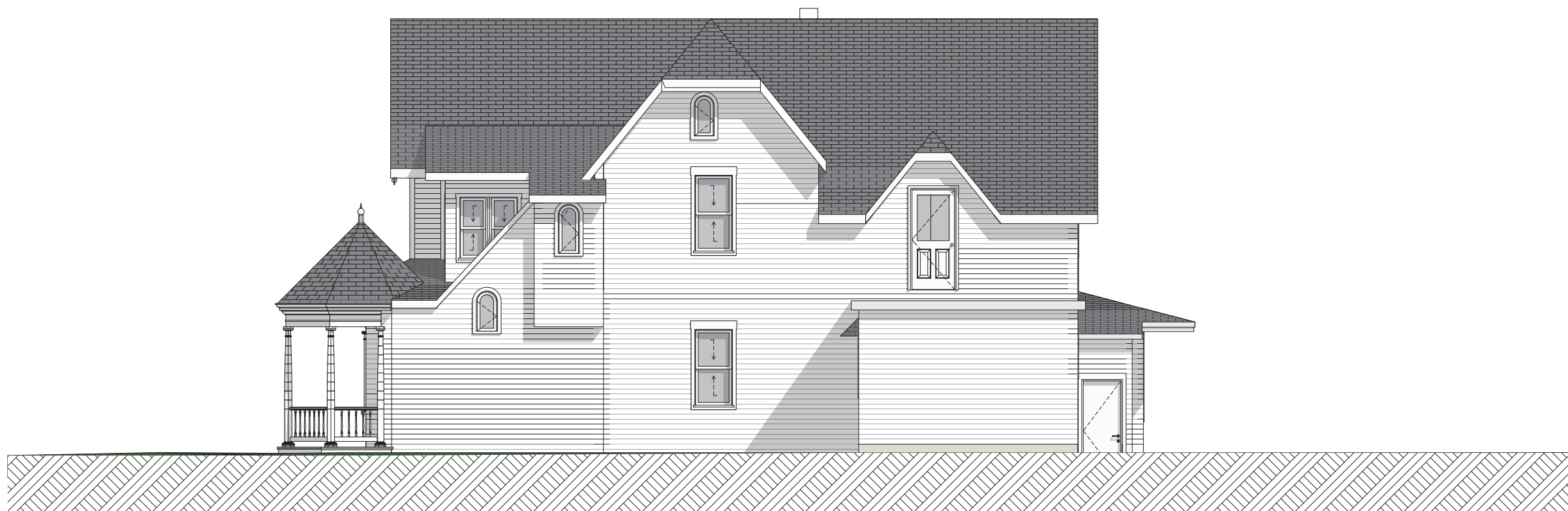
NORTH ELEVATION - EXISTING

SCALE: 1:100

+6.070
3 3rd FLOOR

+3.125
2 2nd FLOOR

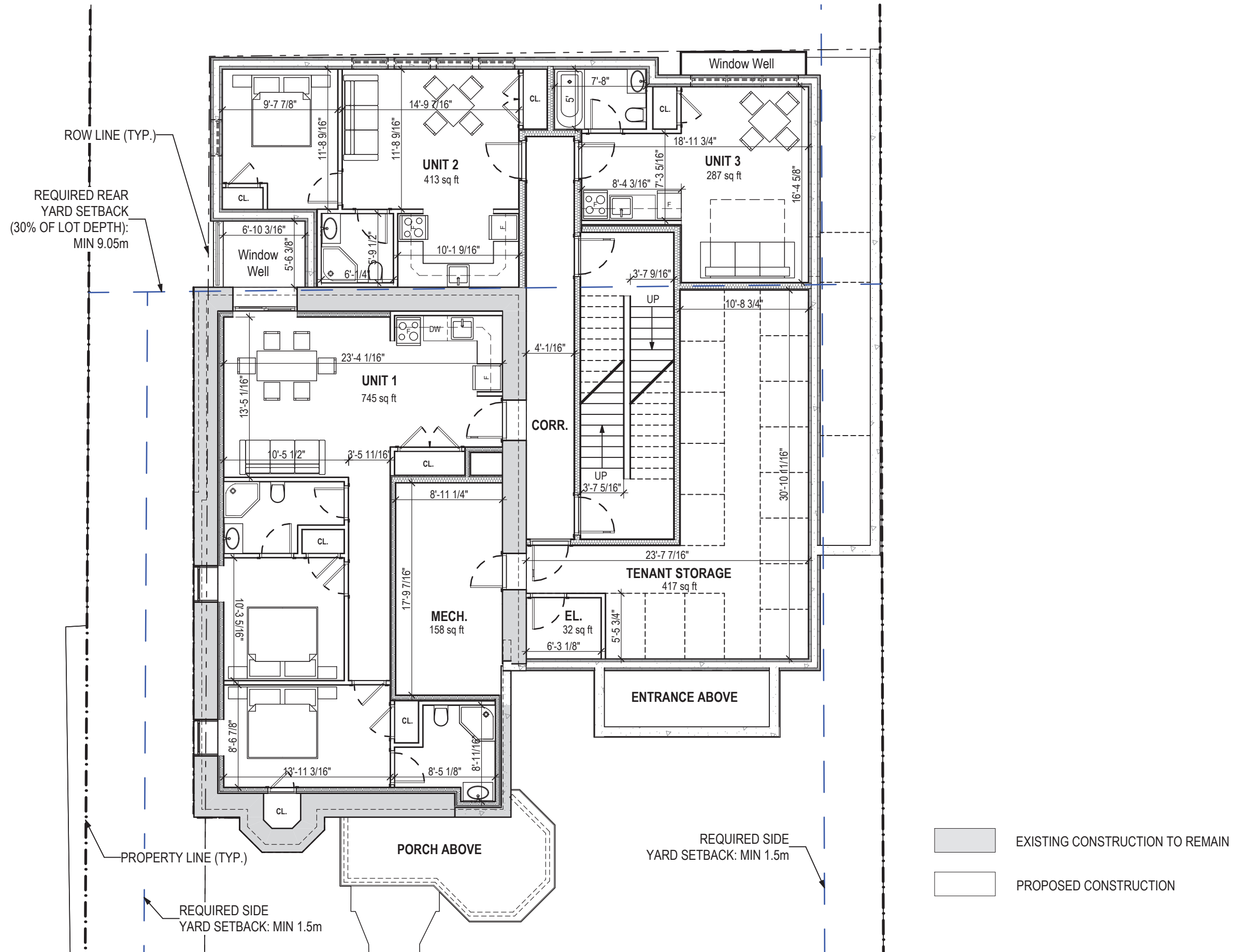
±0.000
1 1st FLOOR

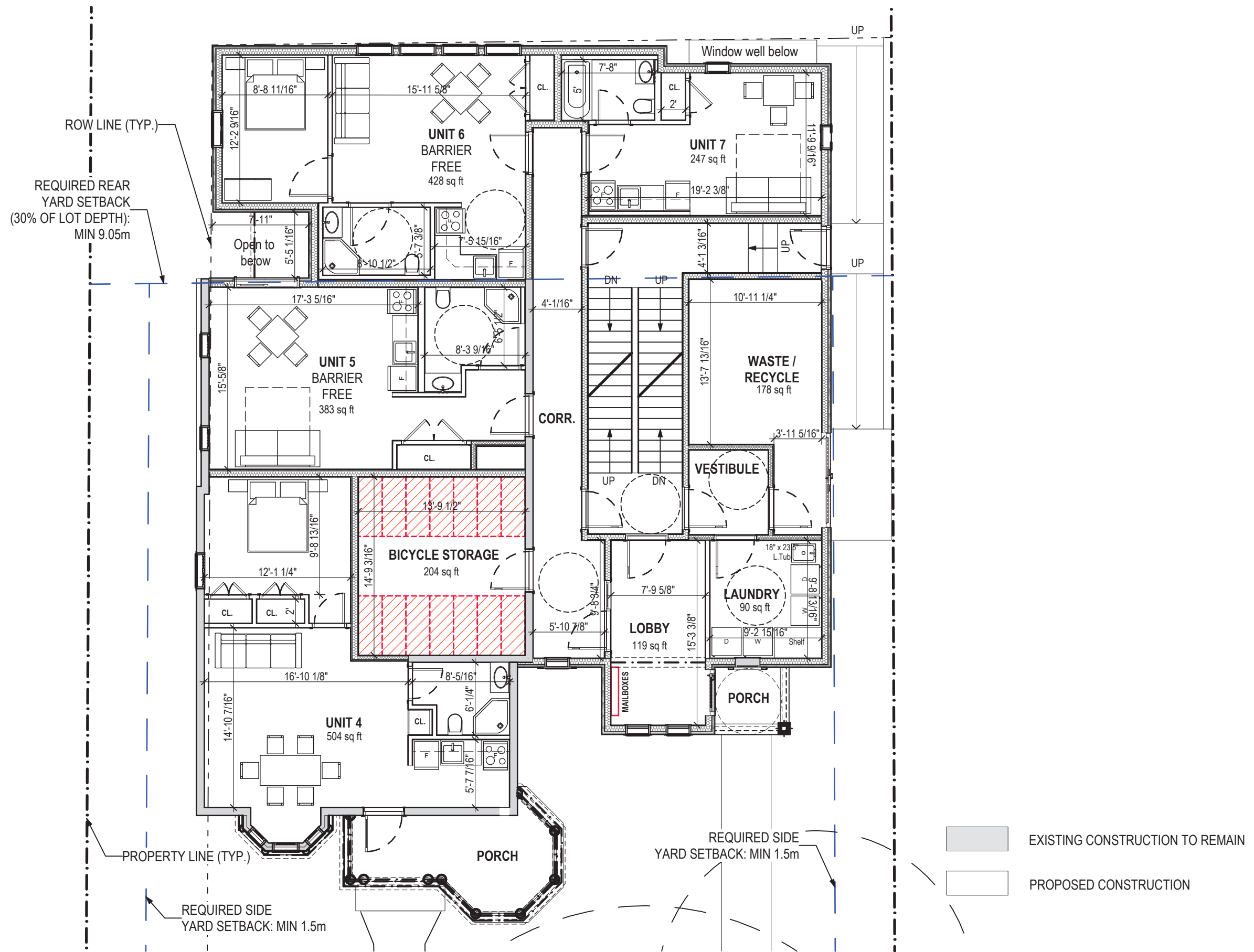


2
SD04

EAST ELEVATION - EXISTING

SCALE: 1:100





ROW LINE (TYP.)

REQUIRED REAR
YARD SETBACK
(30% OF LOT DEPTH):
MIN 9.05m



PROPERTY LINE (TYP.)

REQUIRED SIDE
YARD SETBACK: MIN 1.5m

REQUIRED SIDE
YARD SETBACK: MIN 1.5m

- EXISTING CONSTRUCTION TO REMAIN
- PROPOSED CONSTRUCTION

