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# 1201 Staples St NE

## BZA 19757 Presentation

28 November 2018

Prepared for:

**Clear Sky Properties LLC**  
Sam Jacknin

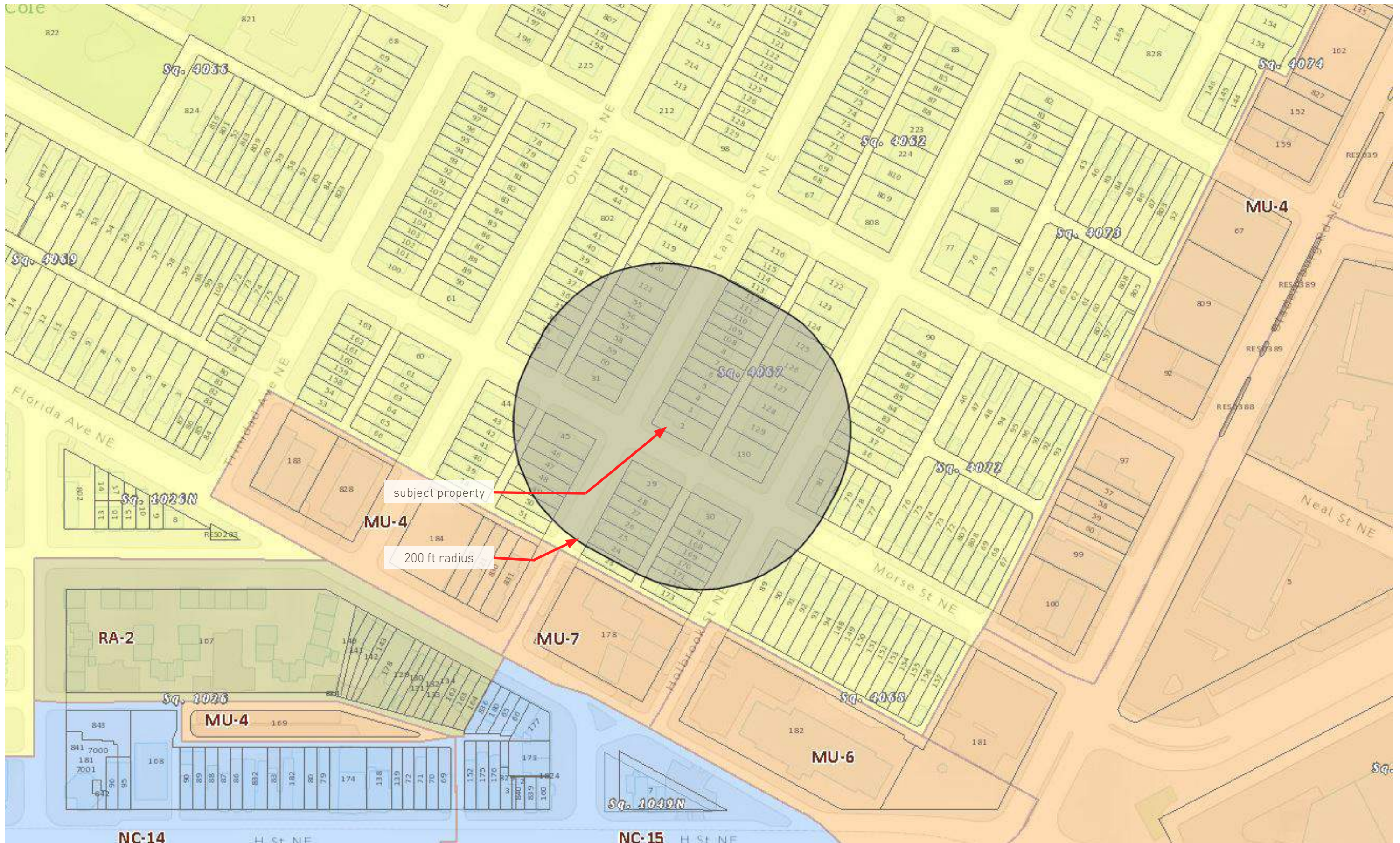
9406 Jackson St  
Burke, VA 22015  
703 587 2475  
sam@jacknin.com

Prepared by:

**Teass \ Warren Architects**  
Will Teass, AIA LEED AP

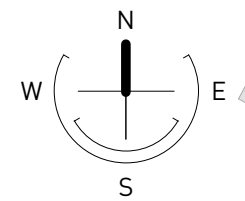
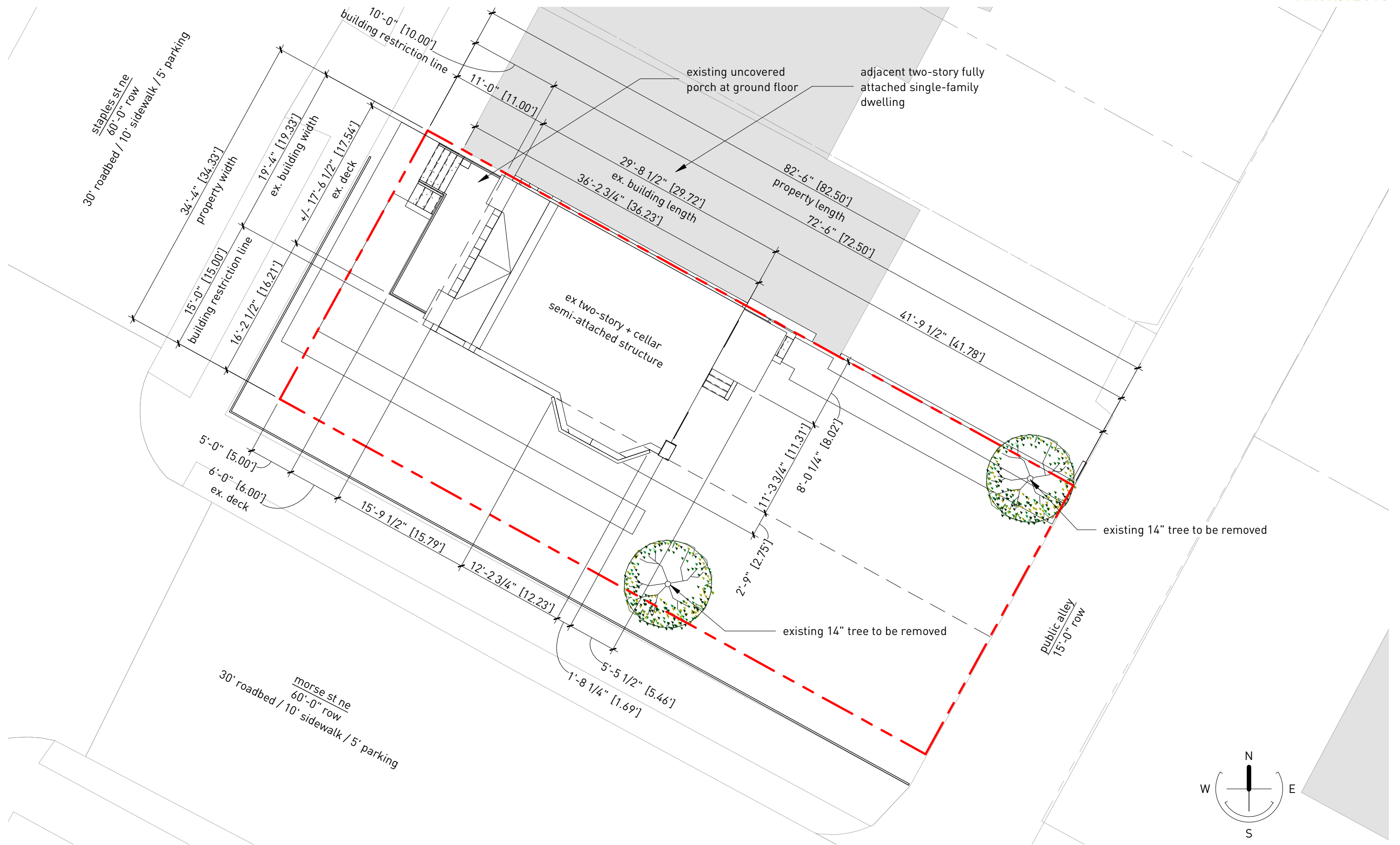
515 M St SE, Suite 200  
Washington, DC 20003  
202 683 6260  
will@teass-warren.com

**Board of Zoning Adjustment**  
District of Columbia  
CASE NO.19757  
EXHIBIT NO.62

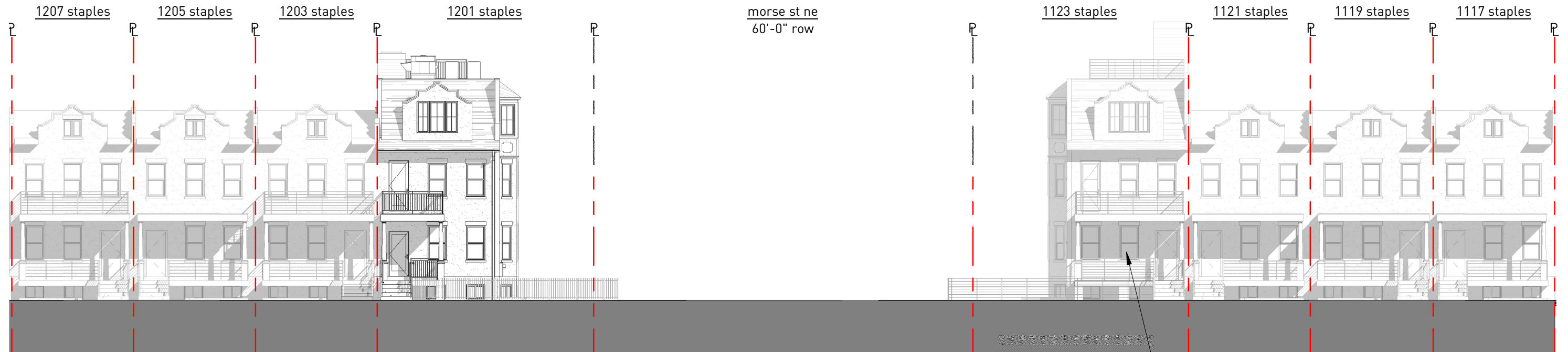




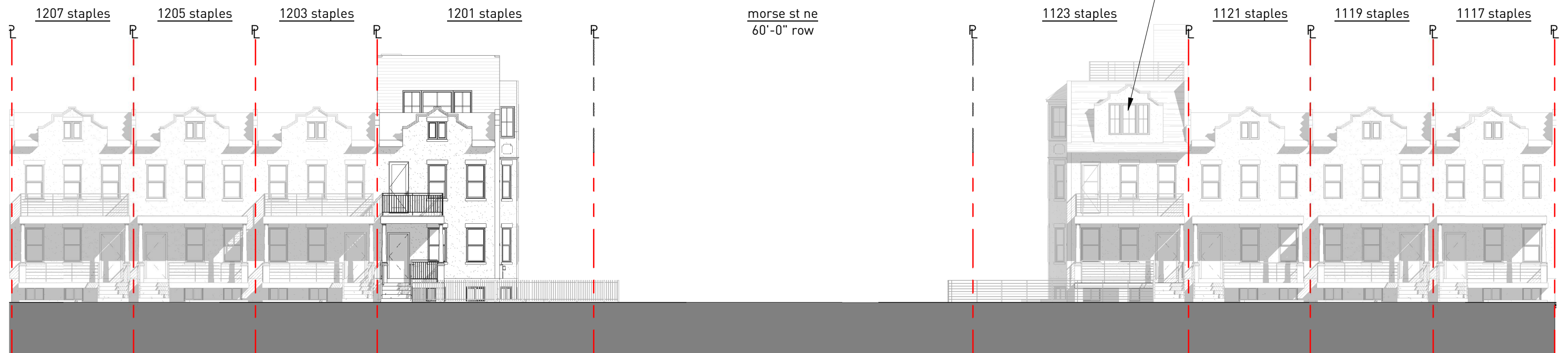




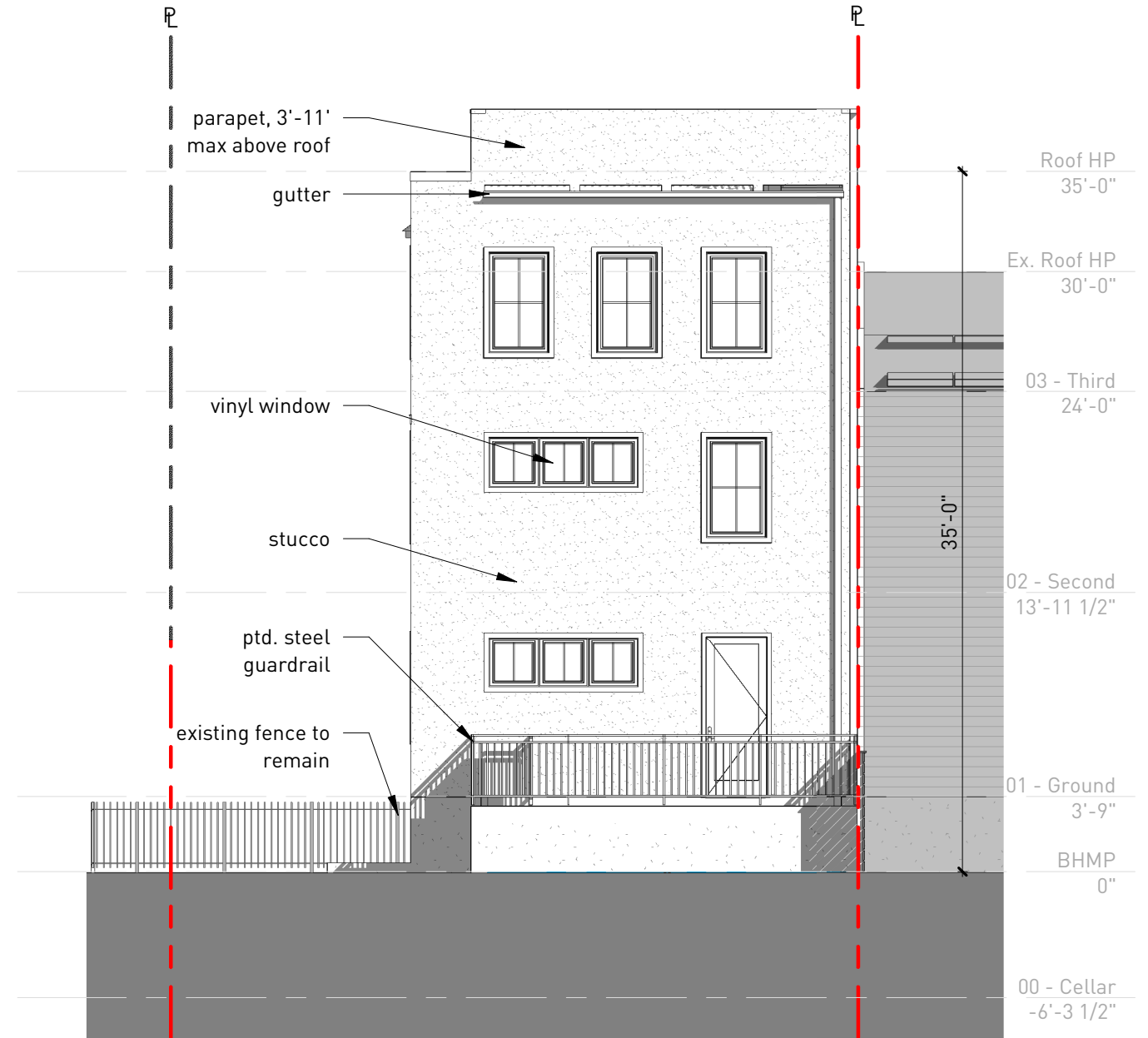
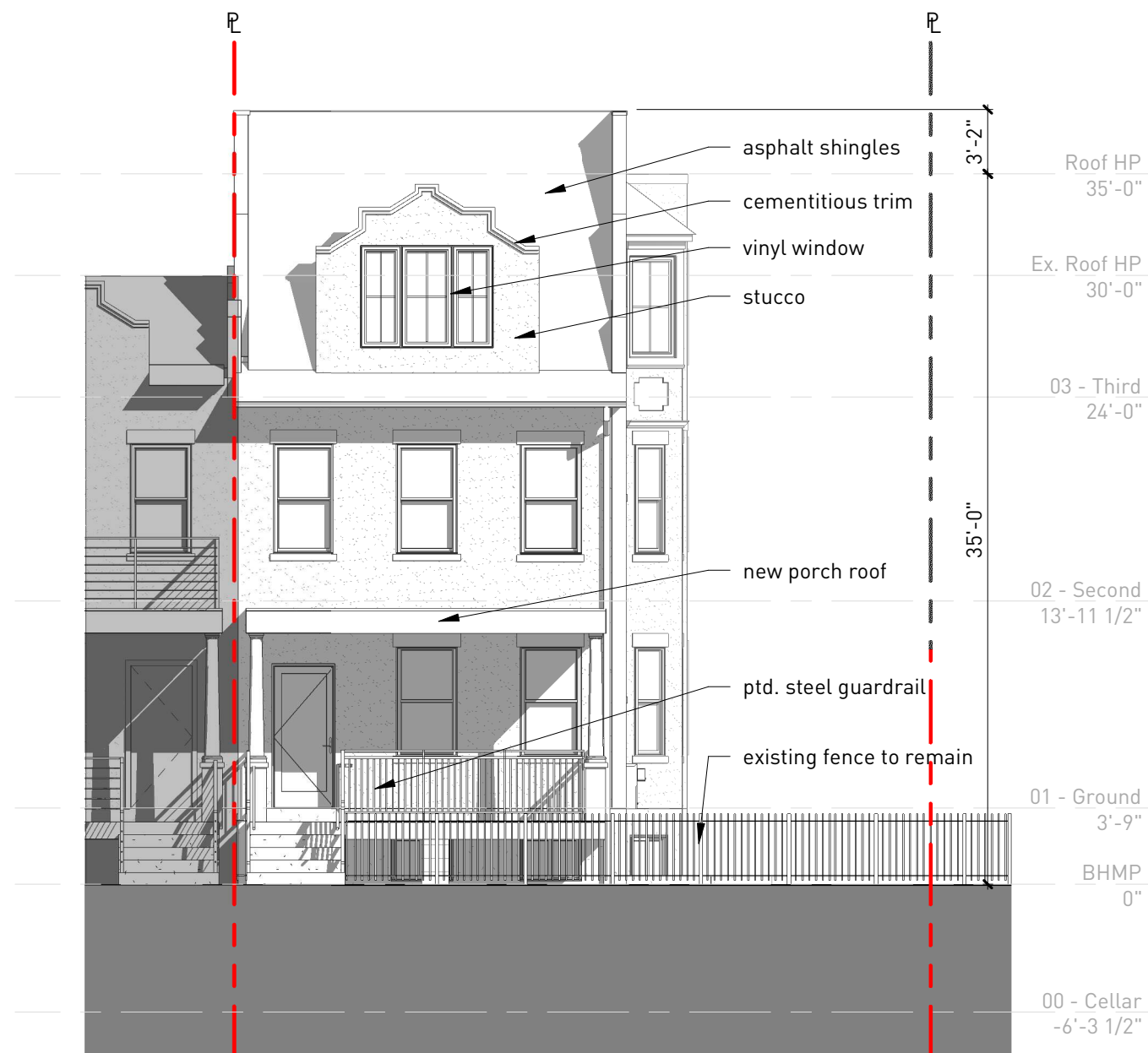




proposed street elevation - staples st ne

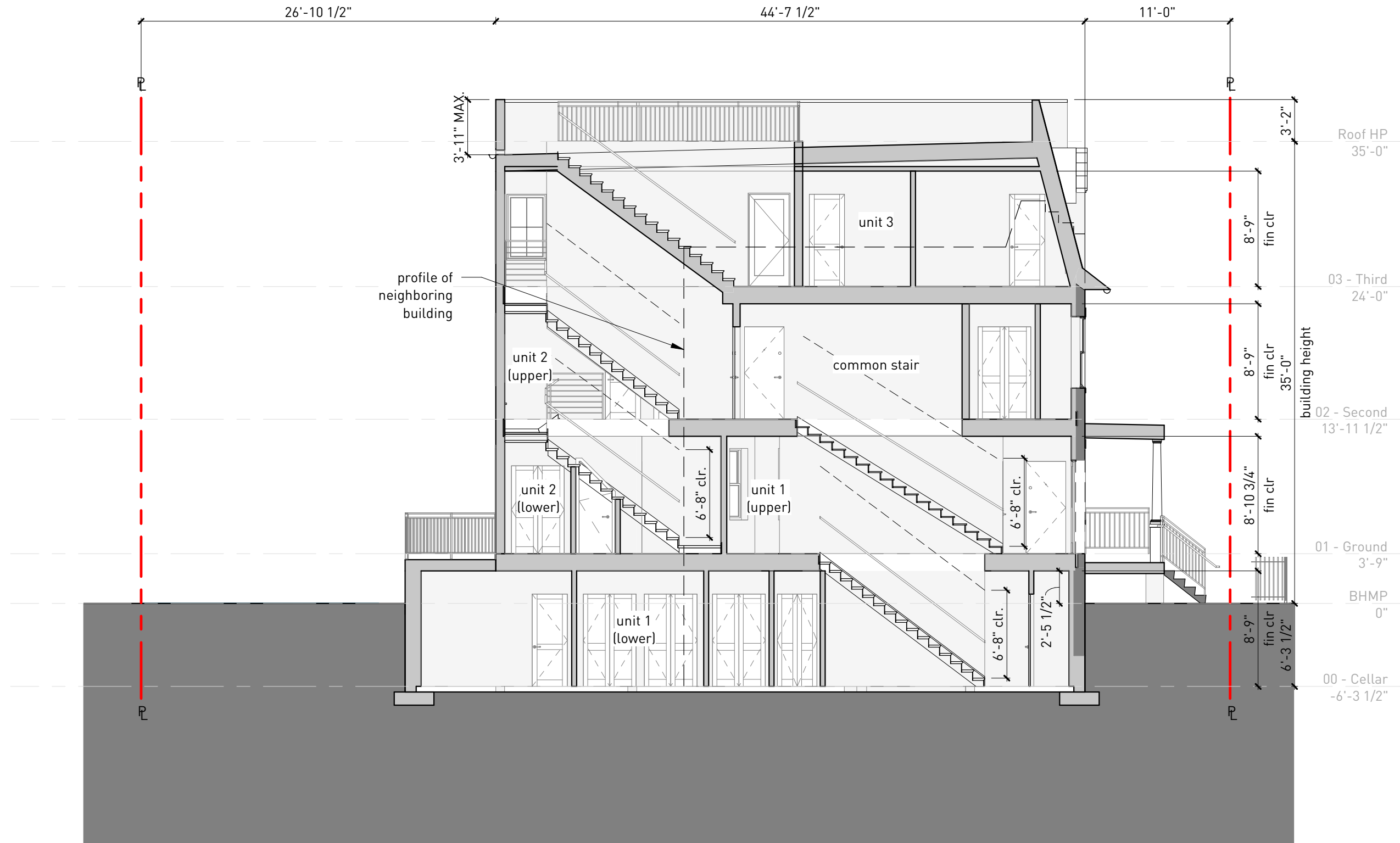


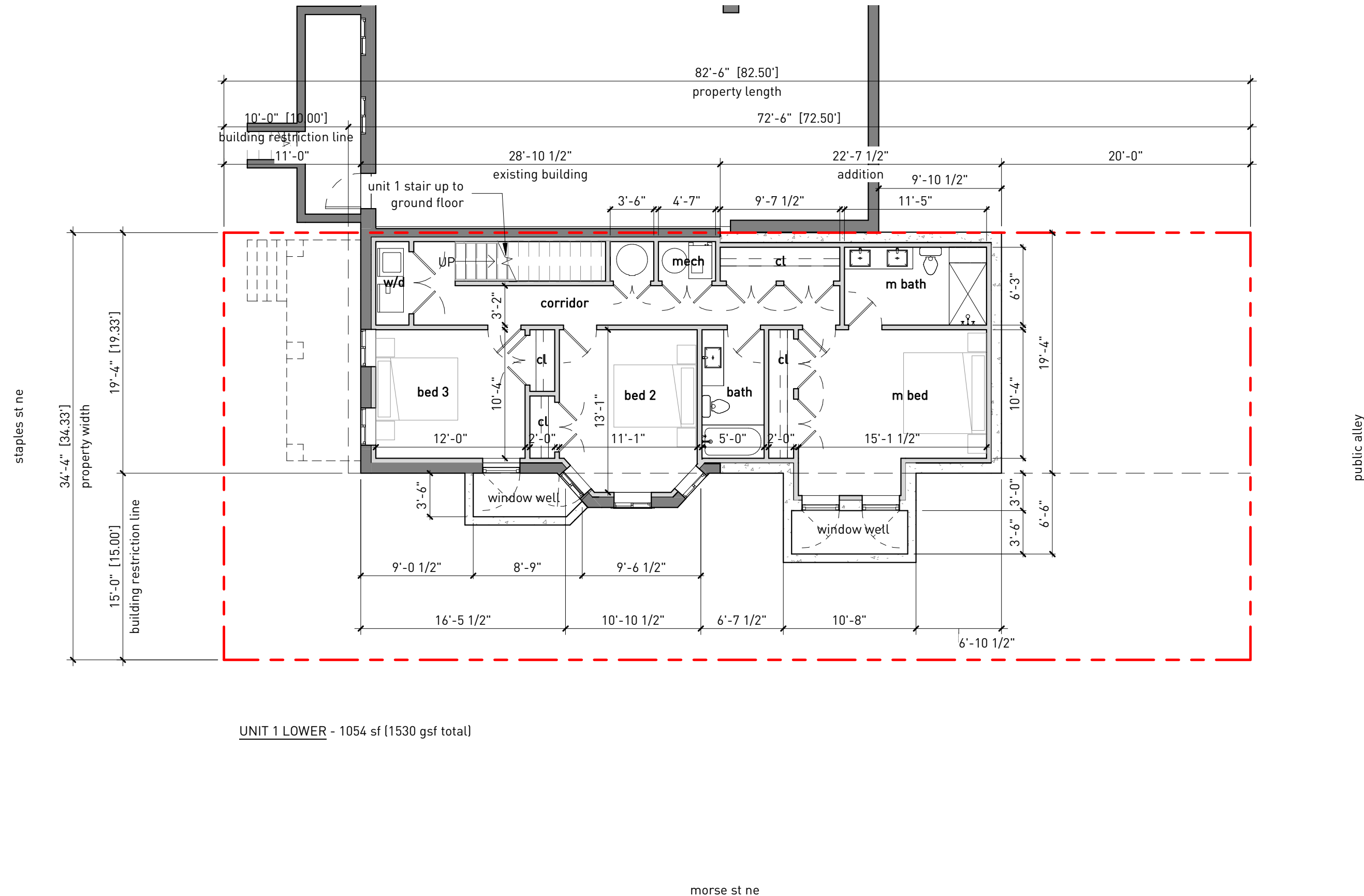
matter of right street elevation - staples st ne



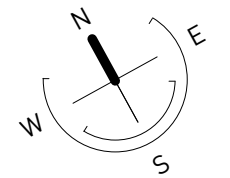


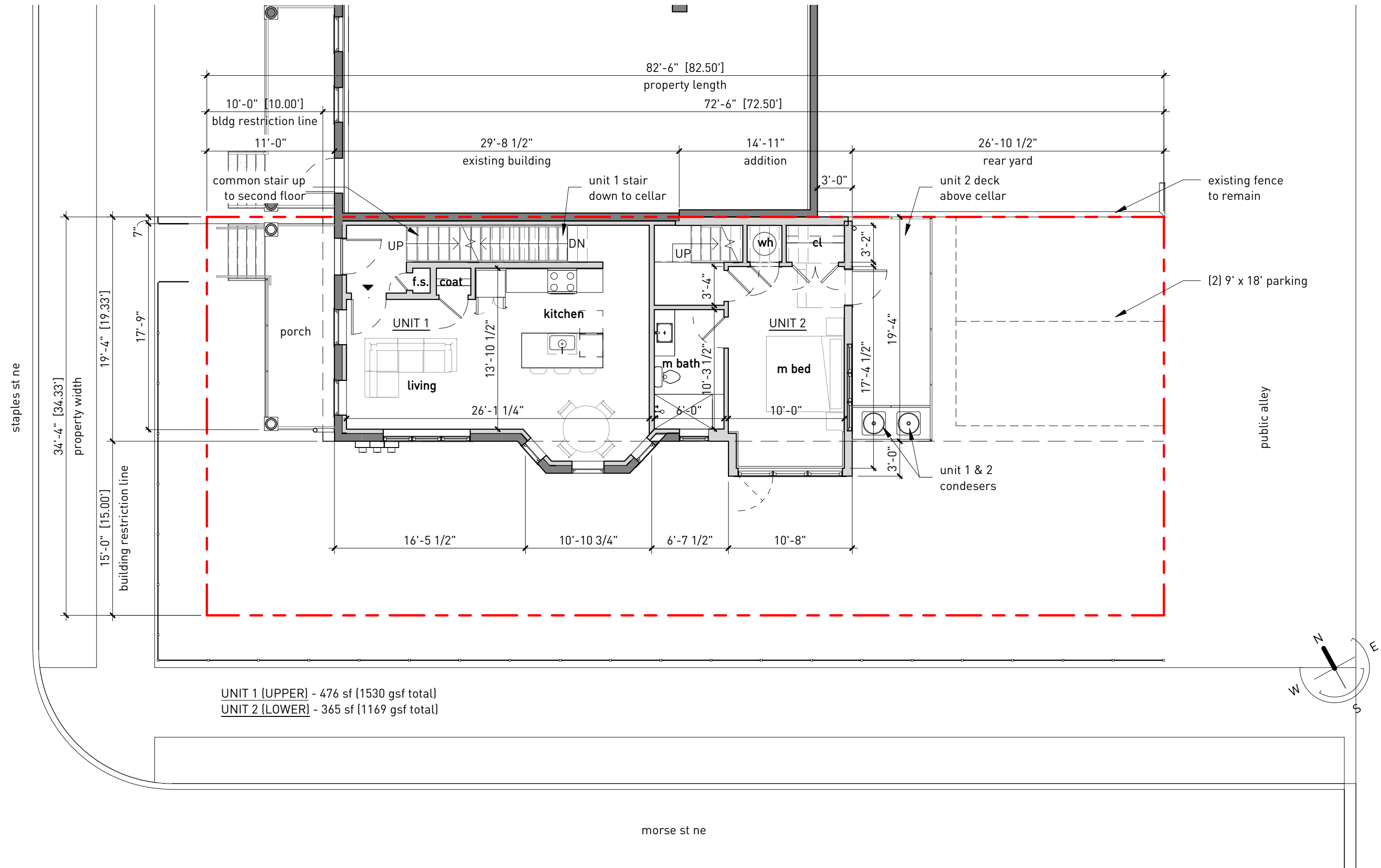


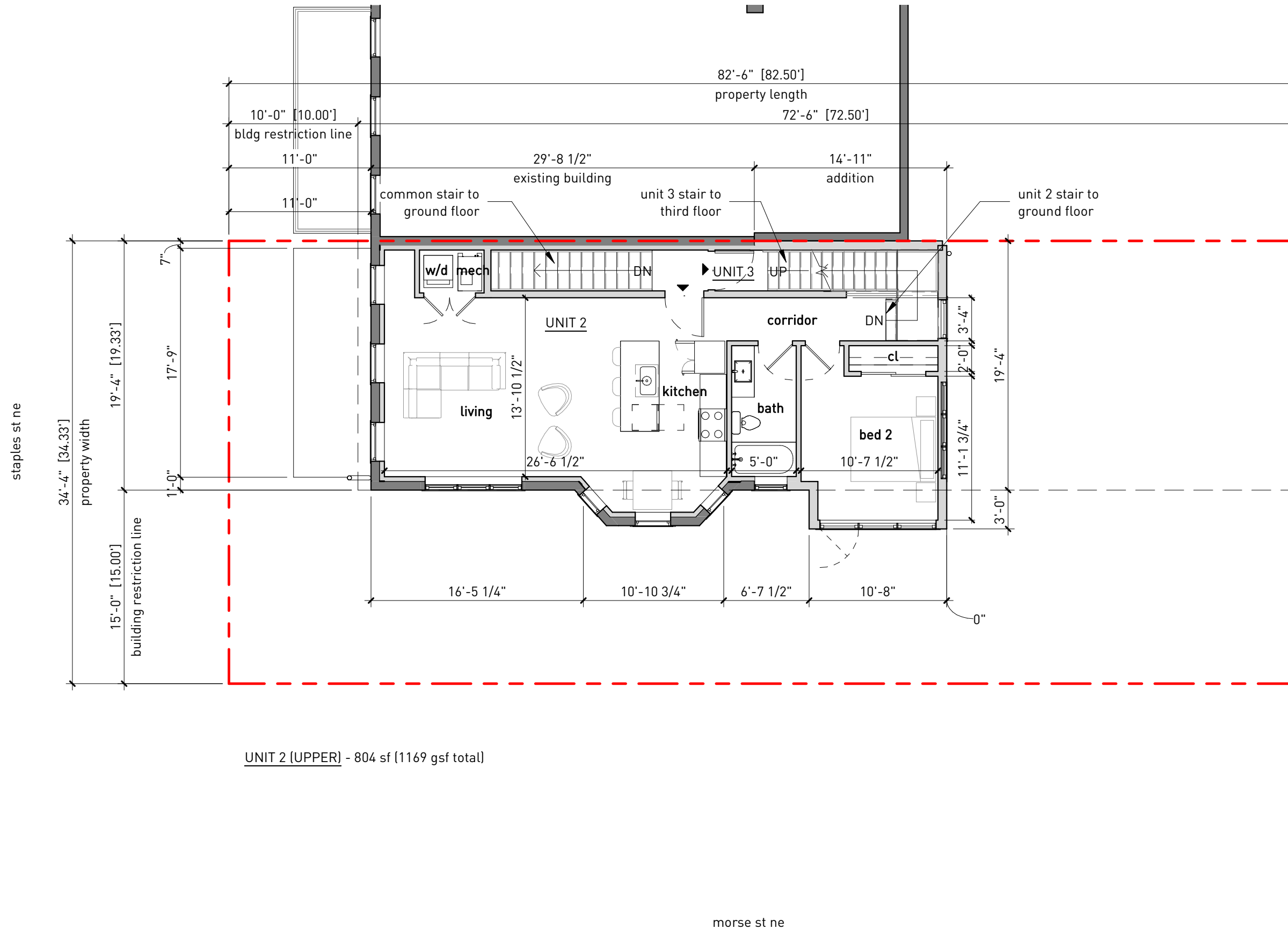




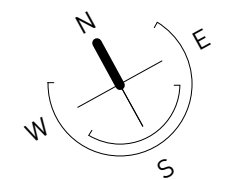
UNIT 1 LOWER - 1054 sf (1530 gsf total)

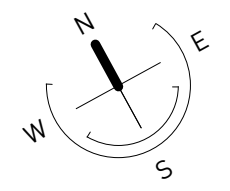
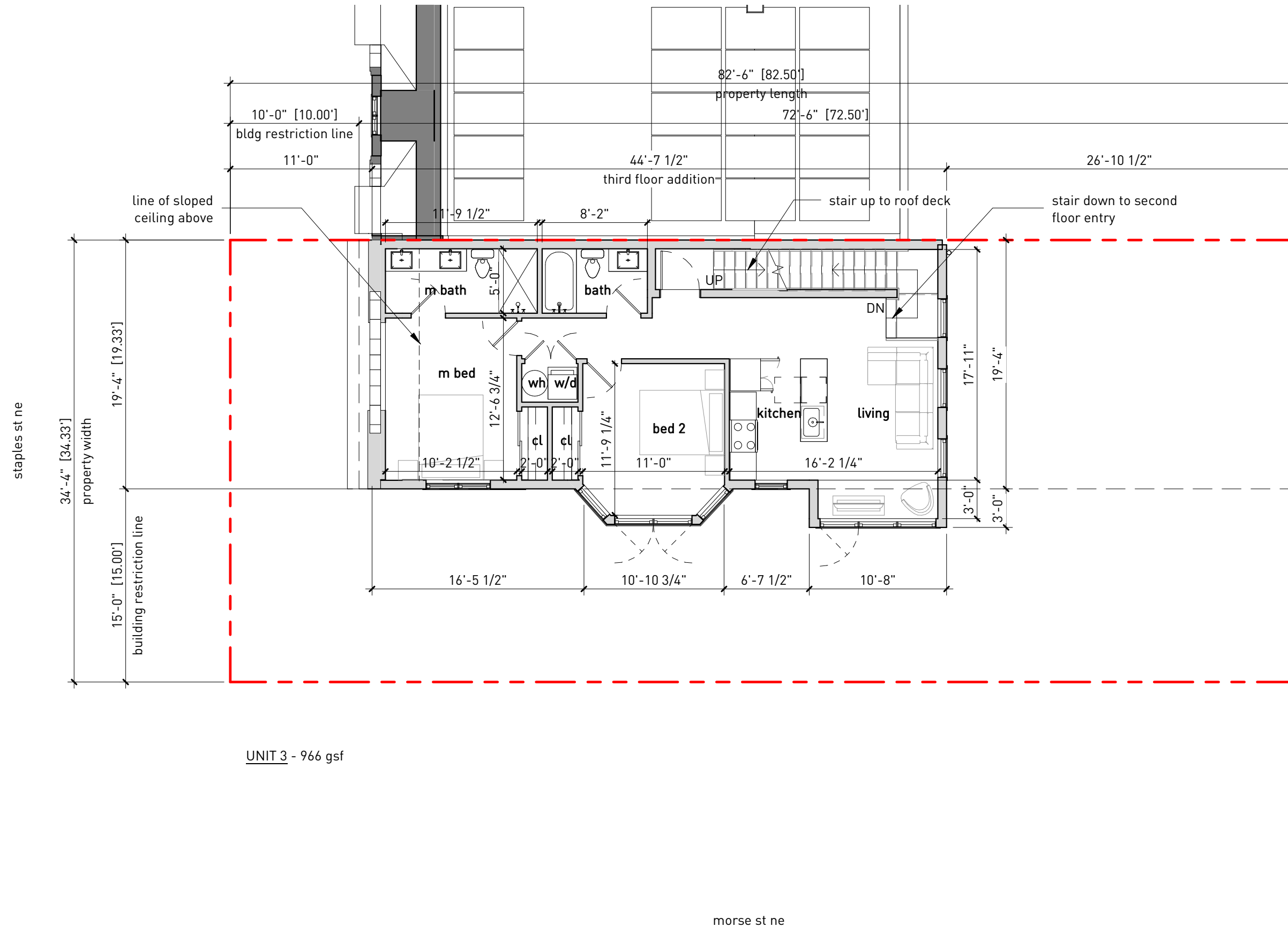


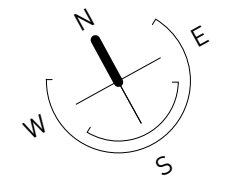
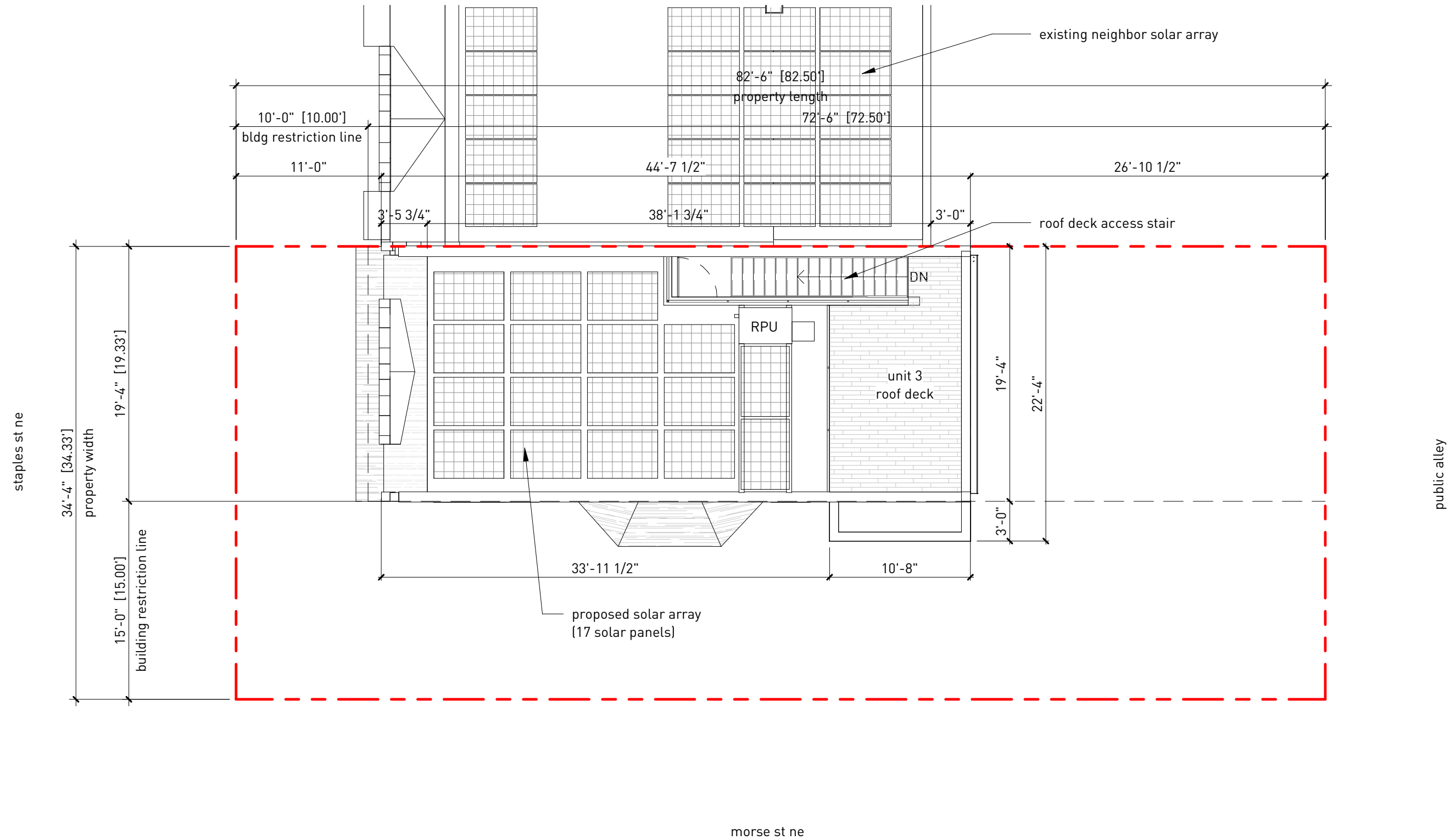




UNIT 2 (UPPER) - 804 sf (1169 gsf total)







**Search By:** **Application ID** **Property Address**

Enter the Property Address to review Application Status:

St. No.\*  St. Name\*  St. Suffix\*  Quad\*

**Application Status by Property Address:**  
Please see the table below for review statuses. The table is not shown if the reviews have not been identified. A blank Status date means that the initial review has not been completed.

**Permits Status**

ApplicationID	Permit Type	Date Filed	Full Address	Agent Name	Phone Number
SOL1800411	Solar System	3/28/2018	1203 STAPLES ST NE	SOLAR SOLUTION DC LLC	202-249-1112
<b>Description of Work</b>					
To install 6.2 kW size of solar panels with a system height of 1.9 feet on the roof of the building.					
<b>Discipline</b>		<b>Review Status</b>		<b>Status Date</b>	
Plan Review Coordinator		Projectdox Accepted		2018-03-28	
Plan Review Coordinator		Projectdox Under Review		2018-04-04	
Structural Review		Structural Review Approved		2018-04-10	
Fire Review		Fire Review Approved		2018-04-10	
Electrical Review		Electrical Review Approved		2018-04-10	
QA Review		Ready for Issuance		2018-04-24	
B1513322	Alteration and Repair Permit	9/30/2015	1203 STAPLES ST NE	KILLETTE AND ASSOC	202-257-2237
D1500857	Demolition Permit	9/14/2015	1203 STAPLES ST NE	KILLETTE AND ASSOC	202-257-2237

*permit ready for issuance on 24 april 2018*

**Construction Inspections** Total Number of Records: 4

Address	Unit	SSL	ID	Type	Completion Status	Completion Date	Detailed Description
1203 STAPLES ST NE, Washington, DC 20002		4067 0003	D1500857	Building Final	Approved	12/08/2015	INTERIOR DEMOLITION TO REMOVE DRYWALL AND PLASTER AND CLEAN DEBRIS. WALLS ARE NON LOAD BEARING.
1203 STAPLES ST NE, WASHINGTON, DC 20002		4067 0003	P1600611	Plumbing Ground Work	Approved	12/01/2015	
1203 STAPLES ST NE, WASHINGTON, DC 20002		4067 0003	E1600819	Electrical - TPF	Approved	11/12/2015	
1203 STAPLES ST NE, WASHINGTON, DC 20002		4067 0003	E1600819	Electrical Final	Scheduled	11/12/2015	

*no electrical inspection on record for solar panels*

Address	Unit	SSL	ID	Type	Date Issued	Status	Status Date	Detailed Description
1203 STAPLES ST NE, WASHINGTON, DC 20002		4067 0003	SOL1800411	Construction/Solar System	05/03/2018	Permit Issued	05/03/2018	To install 6.2 kW size of solar panels with a system height of 1.9 feet on the roof of the building.
1203 STAPLES ST NE, WASHINGTON, DC 20002		4067 0003	E87873935	Supplemental/Electrical	12/10/2015	Permit Issued	12/10/2015	This supplemental permit was issued online. Use the Online Permit View application on DCRA Intranet to view the details and print a copy of the permit. Alternatively, you can copy and paste the following URL into an Internet browser. <a href="https://ospi.dcr.dcr.gov/ospi/PrintPermit.aspx?param=z18lgjE1leLn">https://ospi.dcr.dcr.gov/ospi/PrintPermit.aspx?param=z18lgjE1leLn</a>
1203 STAPLES ST NE, WASHINGTON, DC 20002		4067 0003	M1600252	Supplemental/Mechanical	10/28/2015	Permit Issued	10/28/2015	
1203 STAPLES ST NE, WASHINGTON, DC 20002		4067 0003	E1600819	Supplemental/Electrical	10/27/2015	Permit Issued	10/27/2015	
1203 STAPLES ST NE, WASHINGTON, DC 20002		4067 0003	P1600611	Supplemental/Plumbing and Gas	10/21/2015	Permit Issued	10/21/2015	
1203 STAPLES ST NE, Washington, DC 20002		4067 0003	B1513322	Construction/Alteration and Repair	09/30/2015	Permit Issued	09/30/2015	INTERIOR RENOVATION AS PER PLANS.
1203 STAPLES ST NE, Washington, DC 20002		4067 0003	D1500857	Construction/Demolition	09/14/2015	Completed	12/08/2015	INTERIOR DEMOLITION TO REMOVE DRYWALL AND PLASTER AND CLEAN DEBRIS. WALLS ARE NON LOAD BEARING.

*permit issued 3 may 2018*

Screenshots from 13 June 2018

Screenshots from 13 June 2018



**205 REAR YARD**

- 205.1 A rear yard shall be provided for each structure located in an RF, the minimum depth of which shall be as set forth in each zone chapter.
- 205.2 In the case of a lot abutting three (3) or more streets, the depth of rear yard may be measured from the center line of the street abutting the lot at the rear of the structure.
- 205.3 In the case of a building existing on or before May 12, 1958, an extension or addition may be made to the building into the required rear yard; provided, that the extension or addition shall be limited to that portion of the rear yard included in the building area on May 12, 1958.
- 205.4 Notwithstanding §§ 205.1 through 205.3, a rear wall of an attached or semi-detached building shall not be constructed to extend farther than ten feet (10 ft.) beyond the farthest rear wall of any adjoining principal residential building on an adjoining property.
- 205.5 A rear wall of an attached or semi-detached building may be constructed to extend farther than ten feet (10 ft.) beyond the farthest rear wall of any principal residential building on an adjoining property if approved as a special exception pursuant to Subtitle X, Chapter 9 and as evaluated against the criteria of Subtitle E §§ 5201.3 through 5201.6.

SOURCE: Final Rulemaking published at 63 DCR 2447 (March 4, 2016 – Part 2); Final Rulemaking & Order No. 14-11B published at 64 DCR 4055 (April 28, 2017).

**206 ROOF TOP OR UPPER FLOOR ADDITIONS**

- 206.1 In an RF zone district, the following provisions shall apply:
  - (a) A roof top architectural element original to the building such as cornices, porch roofs, a turret, tower, or dormers, shall not be removed or significantly altered, including shifting its location, changing its shape or increasing its height, elevation, or size. For interior lots, not including through lots, the roof top architectural elements shall not include identified roof top architectural elements facing the structure’s rear lot line. For all other lots, the roof top architectural elements shall include identified rooftop architectural elements on all sides of the structure;
  - (b) Any addition, including a roof structure or penthouse, shall not block or impede the functioning of a chimney or other external vent compliant with any District of Columbia municipal code on an adjacent property. A chimney or other external vent must be existing and operative at the date of the building permit application for the addition; and

Subtitle E-9

- (c) Any addition, including a roof structure or penthouse, shall not significantly interfere with the operation of an existing solar energy system of at least 2kW on an adjacent property unless agreed to by the owner of the adjacent solar energy system. For the purposes of this paragraph, the following quoted phrases shall have the associated meanings:

- (1) “Significantly interfere” shall mean an impact caused solely by the addition that decreases the energy produced by the adjacent solar energy system by more than five percent (5%) on an annual basis, as demonstrated by a comparative solar shading study acceptable to the Zoning Administrator; and

- (2) “Existing solar energy system” shall mean a solar energy system that is, at the time the application for the building permit for the adjacent addition is officially accepted as complete by the Department of Consumer and Regulatory Affairs or an application for zoning relief or approval for the adjacent addition is officially accepted as complete by the Office of Zoning, either:
  - (A) Legally permitted, installed, and operating; or
  - (B) Authorized by an issued permit; provided that the permitted solar energy system is operative within six (6) months after the issuance of the solar energy system permit not including grid interconnection delays caused solely by a utility company connecting to the solar energy system.

- 206.2 In an RF zone district, relief from the design requirements of Subtitle E § 206.1 may be approved by the Board of Zoning Adjustment as a special exception under Subtitle X, Chapter 9, subject to the conditions of Subtitle E § 5203.3.

SOURCE: Final Rulemaking published at 63 DCR 2447 (March 4, 2016 – Part 2); Final Rulemaking & Order No. 08-06D published at 63 DCR 10620 (August 19, 2016); Final Rulemaking & Order No. 14-11B published at 64 DCR 4055 (April 28, 2017); Final Rulemaking & Order No. 08-06L published at 64 DCR 8596 (September 1, 2017).

Subtitle E-10



## District of Columbia DCRA Solar Permitting Guidelines

Solar systems require permits and inspections in the District: this includes residential & commercial, and both PV (electric) & solar thermal systems. This guide provides an overview of code compliance requirements for solar installation, lays out the specific elements involved, and highlights some common pitfalls. This guide is general and indicative in nature: additional code elements may apply to any specific project. The permitting sequence typically involves:

- Plan Preparation\*
- ↓ Permit Application
- ↓ Plan Review
- ↓ Installation\*
- ↓ Inspections\*
- The Operation of a New Solar System

\* There will be Pepco requirements roughly correlating with these steps

### Preparing the Plan Set

Prepare the following documents in your plan set (these will be digital, generally PDF's, for [ProjectDox](#) submittal):

1. Zoning Review: Site plan, Plats & the Solar Zoning Self-Certification Form:  
Site Plan: When the solar system is less than 4' (four feet) above the roof or parapet wall, a [Solar Zoning Self-Certification Form](#) is available on [www.buildgreendc.org](http://www.buildgreendc.org) that may significantly speed permit processing through DCRA. NOTE: Make it very obvious on your plans, with notes and elevations or sections, that the system is less than 4' above the roof: the [Solar Zoning Self-Certification Form](#) will require you to identify the page(s) on which this detail is shown on your plans. Upload the SZSC form, and the associated Clean Hands Certification, into the Supporting Documents folder in ProjectDox for each project. In such cases, it is generally permissible to submit a site plan which is not drawn on an [official DC plat](#). Similar information must be conveyed -- lot lines, existing

### Solar Permitting Guidelines

buildings, and proposed solar system, all accurately dimensioned, labeled, placed & oriented.

Plat: if the project rises more than 4' above the roof, you will need to [obtain a plat](#) from the [Surveyor's Office](#), and the existing structure(s) and proposed solar system must be added to the plat and labeled accordingly. The online guide "[Steps to Showing Improvements on Plat](#)" is available to help clarify these requirements.

2. DCRA does not require neighbor notifications for solar projects that do not involve either:

- a. the installation of the structural support of an adjacent building, structure or premises or
- b. the underpinning of a party wall.

If the Code Official or designee determines a project **does** involve such work and is, therefore, subject to Sections 3307.2 or 3307.3, the applicant will be required to provide neighbor notification pursuant to those sections of the DC Building Code.

A solar system attached to a party wall ("that could affect the structural integrity of a party wall") does not require neighbor notification, but pursuant to 3307.4:

"[T]he person causing the work shall preserve the party wall from injury and ensure the structural stability of the party wall at said person's own expense. The party wall shall be maintained weatherproof and structurally stable."

3. Construction Documents<sup>1</sup> (Scaled plans, specs, and details)

- a. All plans should be submitted as single-page pdfs. Refer to the ProjectDox User Manual for further information.
- b. Site Plan showing the north arrow, including the location of all major components including modules, inverter(s), disconnects, main electrical service, and meter (this can optionally be on the same site plan addressed above).
- c. Architectural plans including roof layout and schematic detailing of the solar modules and roof attachment details.
- d. Engineering plans including electrical, fire protection, structural, plumbing and mechanical (as appropriate) with associated calculations.
- e. Please refer to the online DCRA ProjectDox Applicant User Guide for further details on ProjectDox protocol.

<sup>1</sup> 12 DCMR A, DC Building Code Supplement, Section 106

## Further Guidance on Engineering Plan Submissions

### ELECTRICAL ENGINEERING REVIEW

Submit a completed Standard Electrical Plan that includes the following:

1. Locations/position of the main service or utility disconnect (these can be on the site plan referenced above).
2. Total number of modules, the number of modules per string, and the total number of strings.
3. Makes and models of inverters, combiner boxes, optimizers and other equipment.
4. One-line or Three-line diagram of the system.
5. Specify grounding/bonding connections & hardware, conduit type and size, and a number of conductors in each section of conduit. Show calculations to verify proper temperature de-rating, etc.
6. Equipment cut sheets including inverters, modules, racking systems, AC and DC disconnects and combiners, pumping stations, storage tanks, etc.
7. Intended labeling of equipment as required by NEC sections 690 & 705, and as indicated below.

### FIRE ENGINEERING REVIEW

Commercial PV systems shall meet code requirements in DC Fire Code 605.11. This requires as a minimum a 4' setback from all roof edges (sometimes 6'). The [DCFC is available online](#).

### STRUCTURAL ENGINEERING REVIEW

1. Verify existing structural members including beams are in compliance with current building code under change in snow load pattern caused by the modules (drifting and sliding snow), wind loads, dead loads of modules and their mounting system, ballast, etc., as well as existing roof dead loads both for strength and deflection, as applicable.
2. Note that ground snow loads in Washington DC are 25 psf Residential and 30 psf Commercial for the purpose of structural calculations.
3. An optional Certification of Structural Design is available per 2013 DCMR 12A 106.1.4.1 which involves an application form and indications on related plan pages; The code official is authorized to accept the structural portions of the plans thus certified at the code official's discretion. The engineering documentation should show clear evidence that the project was fully considered by the engineer.

Note that the applicant is responsible for coordinating with Pepco on all interconnection application requirements. Generally, that will initially include Part 1 of the Pepco Interconnection Application. You will have to receive "Permission to Install" from Pepco before starting the installation. For more details on the interconnection application process and the required forms, visit Pepco's NEM and Small Generator Interconnection website at [www.pepco.com/greenpowerconnection](http://www.pepco.com/greenpowerconnection).

### The Solar Permit Application Process

Permitting begins online. Start the process at [dcra.dc.gov](http://dcra.dc.gov) at the [Online Construction Permit Intake \(OCPI\)](#). Under "Type of Proposed Work" select "Solar System": this will get you to the new, solar-specific permit application (SOLxxxxxx permits). Several pages further, you will enter the details of the system -- the precise fields required will depend somewhat on prior choices (i.e. solar thermal vs. solar PV systems). Note that in the case of PV, you will enter the number, and size of modules (i.e., 280 Wp), and OCPI will calculate total system size (therefore, you do not enter system size in kW: only module size and number).

**PRC (DCRA First Visit):** After completing the online application, the applicant comes into DCRA where a Plans Review Coordinator (PRC) determines what review categories/disciplines apply to that job. The applicant is subsequently sent an email invitation to upload their plans into [ProjectDox](#), DCRA's online electronic permitting application.

**ProjectDox:** Once the applicant has logged into ProjectDox, the plans are submitted as PDF files online<sup>2</sup>. Review proceeds concurrently by all departments following a QA review.

#### Advantages of ProjectDox:

- Concurrent review by all departments allows for a quicker turnaround than a sequential approach.
- Online application means plans are submitted, monitored and updated without requiring visits to DCRA.
- Digital/Electronic plans mean no copy costs, free use of color, simpler permit sizing constraints, and easy sharing and transmission of permits in both application and issued stages.

#### Cautions:

- Very specific plan formatting requirements -- file names, page layouts and other plan features have to meet system requirements precisely (see online [ProjectDox Applicant User Manual](#)).
- Learning curve for the applicant: requires some computer skills.
- Currently, the applicant must visit DCRA at least twice: once for the initial PRC & payment, and once for permit issuance (these functions may be available online at some point). In general, these will be relatively brief visits.

<sup>2</sup> ProjectDox can accept other file formats, but converts them all to pdf. The online DC ProjectDox Applicant User Guide goes into the details of the ProjectDox submittal process.

Solar Permitting Guidelines

The following reviews are most likely to be necessary when installing a solar photovoltaic system: **Electrical, Fire Protection, Structural, and Zoning (or self-certification)**, Plumbing, Mechanical, and Historic Preservation<sup>3</sup> (bold disciplines are always required). While some projects are assessed fees at the PRC stage, fees are often paid at issuance.

**Solar Permit Fees**

Solar permitting fees were adjusted effective 10/1/14.

**Solar Electric (PV)** system fees will be assessed at the following rates:

DCRA Schedule of Fees <sup>4</sup> for Solar PV Systems				
	< 15 kW	15-99 kW	100-200 kW	200 kW
Building Permit Fee	\$250 Residential/ \$300 Commercial	\$300+ \$11.25/kW >15	\$1250 + \$2.50/kW>100	\$1500 + \$1/kW >200
Enhancement Fee	10% of total fee			

**Solar thermal** system fees will be assessed at the following rates:

DCRA Schedule of Fees for Solar Thermal Systems				
Building Permit Fee	Fewer Than 10 Panels	10-24 Panels	25-49 Panels	50 Panels and More
	\$250 Residential \$300 Commercial	\$300 + \$25 per each panel > 10	\$650 + \$15 per add. panel > 25	\$1010 + \$10 per add. panel > 50
Enhancement Fee	10% of total fee			

In addition to the building permit, there will be required trade permits (i.e. Electrical, Mechanical, and Plumbing). The most common of these will be Electrical permits for residential PV. Only a DC-licensed master tradesperson may apply for trade permits. Typical residential PV Electrical trade permit requirements will depend on where the system lands:

<sup>3</sup> Further information on the requirements of Historic Preservation is available online.

<sup>4</sup> For full schedule of fees go online to: <http://dcra.dc.gov/publication/building-permit-fees>; [http://lms.dccouncil.us/\\_layouts/15/uploader/Download.aspx?legislationid=31515&filename=B20-0750-SignedAct.pdf](http://lms.dccouncil.us/_layouts/15/uploader/Download.aspx?legislationid=31515&filename=B20-0750-SignedAct.pdf)

Solar Permitting Guidelines

- Backfed Breaker in existing panel
  - \$20 for branch circuit/breaker (Group 1)
  - \$33 for Inverter/transformer 1-10 kVA (Group 9)
  - + 10% Enhancement fee = \$58.30
- Line-side tap
  - \$20 for feeder conductor (feeder tap) (Group 13)
  - \$33 for Inverter/transformer 1-10 kVA (Group 1)
  - + 10% Enhancement fee = \$58.30

**BUILDING PERMIT ISSUANCE**

After the assigned reviews have been completed, the customer comes into DCRA, goes to the issuance desk, documents are checked for completeness, remaining fees are paid, and the building permit is issued. Since fees for solar are often confirmed during the structural review, the customer often receives an invoice at this point and pays the fees to the cashier, if they haven't already. Fees can be paid by cash, check, and credit card.

**INSPECTIONS**

Following construction, DCRA must conduct inspections of Solar installations to ensure compliance with the approved plans and the D.C. Construction Codes – these consist of a Final Building Inspection and a Final Electrical Inspection, and others as applicable. Such inspections are scheduled through [DCRA's phone-in inspection scheduling system \(IVR\)](http://dcra.dc.gov/service/schedule-construction-inspection). Further information can be found here: <http://dcra.dc.gov/service/schedule-construction-inspection>. At present, we are working to provide scheduling SOL permit types on IVR. We encourage customers to schedule the electrical inspection via IVR and then call into DCRA to personally schedule the solar inspection simultaneously at (202) 442-9557.

After inspections, the contractor or customer will be required to submit a copy of your DCRA On-Site Inspection Record to Pepco along with Part II of your Pepco Interconnection Application and a signed Certificate of Completion. For more details on the interconnection application process and to access all the required forms, visit Pepco's NEM and Small Generator Interconnection website at [www.pepco.com/greenpowerconnection](http://www.pepco.com/greenpowerconnection).

Solar Permitting Guidelines

**SOLAR PV AGENCY CONTACTS**

Agency	Division	Contact	Email
DCRA	Office of the Zoning Administrator	Kathleen Beeton	<a href="mailto:kathleen.beeton@dc.gov">kathleen.beeton@dc.gov</a>
DCRA	Green Building	Keith Winston	<a href="mailto:keith.winston@dc.gov">keith.winston@dc.gov</a>
DOEE	Department of Energy & Environment	Emil King Daniel White	<a href="mailto:emil.king@dc.gov">emil.king@dc.gov</a> <a href="mailto:daniel.white2@dc.gov">daniel.white2@dc.gov</a>
Pepco	Green Power Connection	Team	<a href="mailto:gpc-south@pepco.com">gpc-south@pepco.com</a>

Department of Consumer & Regulatory Affairs | 1100 4th Street SW, Washington, DC 20024 | 202.442.4400 | [dcra.dc.gov](http://dcra.dc.gov)

