



## Executive Director's Recommendation

Commission Meeting: October 3, 2019

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### PROJECT

#### Firing Range Facility Expansion

Joint Base Andrews

Camp Springs, Maryland

### NCPC FILE NUMBER

8056

### NCPC MAP FILE NUMBER

3207.00(38.00)45003

### SUBMITTED BY

United States Department of Defense

Department of the Navy

### APPLICANT'S REQUEST

Approve final site and building plans

### REVIEW AUTHORITY

Federal Projects in the Environs

per 40 U.S.C. § 8722(b)(1)

### PROPOSED ACTION

Approve final site and building plans

### ACTION ITEM TYPE

Consent Calendar

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## PROJECT SUMMARY

The Navy has submitted a proposal to expand and improve the existing firing range facility at Joint Base Andrews. The project entails: construction of two new buildings (identified as Buildings A and B); refurbishment of an existing administrative building (identified as Building C); expansion of (and restriping of) the existing parking lot; and development of new on-site bio-retention areas, new sidewalks, new fire/emergency/service access roads, and additional chain-link perimeter fencing, to encompass the expanded facility area. The project will not increase on-site parking capacity, nor increase site employment. The new enclosed firing range building (Building A) will have an area of approximately 20,800 square feet and the new administrative building (Building B) is designed with an area of approximately 4,300 square feet.

## KEY INFORMATION

- The Department of the Navy has submitted the project on behalf of the Air Force.
  - The firing range expansion is included in the 2016 JBA Installation Development Plan, which was reviewed by NCPC in January 2018 as a draft. The Plan has not yet been resubmitted for final review by the Commission.
  - The site design was selected from a set of three potential alternatives (through an Environmental Assessment) as most compatible with several project goals including: optimizing their training operations and range utilization; eliminating range scheduling conflicts; improving safety conditions for trainees and instructors; and having adequate facilities to support training and instruction.
  - Expansion into nearby cleared land (to the southeast of the current facility) was considered as an EA alternative, but was not selected based on the area's use as a capped landfill and other safety considerations.
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## RECOMMENDATION

The Commission:

**Approves** the final site and building plans for the Joint Base Andrews firing range facility in Camp Springs, Maryland.

**Notes** that the applicant provided additional information related to fire-emergency vehicle access, stormwater management, and tree removal mitigation to respond to the Commission's previous preliminary review request.

## PROJECT REVIEW TIMELINE

|                                        |                                                              |
|----------------------------------------|--------------------------------------------------------------|
| <b>Previous actions</b>                | <b>June 2019</b> - Preliminary site and building plan review |
| <b>Remaining actions (anticipated)</b> | None                                                         |

## PROJECT ANALYSIS

### Executive Summary

NCPC staff has reviewed the project and recognizes that the proposed expansion (to a specialized facility) is necessary to accommodate current Department of Defense safety standards and demand for training at Joint Base Andrews and other military installations across the Region. The submission includes additional information related to fire-emergency access, stormwater management, and tree removal mitigation to respond to the Commission's previous preliminary review request. Therefore, staff recommends that the Commission **approve the final site and building plans for the Joint Base Andrews firing range facility in Camp Springs, Maryland.**

### Background

The proposed firing range facility expansion is necessary to accommodate current safety and other Department of Defense standards related to emergency access, anti-terrorism/force protection, disabled personnel access, in addition to increased demand for training space. The facility is currently used by on-base personnel and personnel from other installations across the region. The current facility, which consists of an "open air" firing range, storage building, administration building, and on-site surface parking (52 spaces) and circulation, was initially developed in 1991. The site is enclosed with an 8'-0" high chain-link fence for perimeter security, with forested land surrounding the site and wetlands adjacent to the south side of the site. A paved access drive is aligned along the west of the existing firing range area, and an unpaved access drive exists to the east.

The proposed expansion will construct a new 21,000 square foot indoor firing range building (identified as Building A), and new 4,300 square foot administration building (Building B); renovate the existing 650-foot administration building (Building C); restripe and slightly expand the surface lot; add sidewalks with covering canopy, new bio-retention areas, and new fire/emergency access driveways; and realign the perimeter fence to enclose the additional land area. Joint Base Andrews will continue to use the existing "open air" range and storage shed. The project is included in the current 2016 Joint Base Andrews Installation Development Plan.

The new firing range building (Building A) is industrial in appearance, rectangular in shape, measuring roughly 120-0' x 160-0', with a standing seam metal roof, brick-facade walls, and ventilation equipment along the northeast side of the structure. The new administration building (Building B) is rectangular in shape, measuring 80' x 60', with a standing seam metal roof and brick-facade walls. Building B will be located along the eastside of the existing administration building (Building C), which will be renovated and remain in administrative use once the renovation is complete. A new linear walkway canopy, with a metal roof, will provide weather protection between Buildings B and C.

The facility's employee population and parking will remain the same after the planned expansion is complete. However, the lot will be re-stripped (eliminating 10 spaces) and 10 new spaces will be added, with five new spaces along a new fire/emergency/service access road and five new spaces along the west-side of the lot. The project will remove 3.31 acres of trees to the north and east of the existing site to construct four new bioretention areas, a stormwater management pond, and new emergency/fire/service access driveways surrounding the new development. The submission notes that the new vehicular access is mandated per current Department of Defense code (UFC 3-600-01 §9-1.1), which relates to all-weather ground access. The proposed tree removal will be mitigated in compliance with the Joint Base Andrews Arbor Plan, which requires new tree planted in designated reforestation areas. The reforestation sites are situated in the northwest part of the installation, near the Jones (HQ) Building.

## **Analysis**

### *Project Context*

The expansion is consistent with the 2016 Installation Development Plan, which shows the site as appropriate for industrial uses. In addition, the proposed expansion is necessary to sustain mission readiness by maintaining installation training capabilities as expressed in the Environmental Assessment (EA) report. The EA also studied two other potential expansion configuration alternatives. The current submission reflects the Air Force's preferred alternative, which is to expand adjacent to the existing facility along the north and east sides. The Air Force identified their Preferred Alternative based on its capacity to satisfy several goals, which included: optimizing their training operations and range utilization; eliminating range scheduling conflicts; improving safety conditions for trainees and instructors; and having adequate facilities to support training and instruction.

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*Additional Information*

The Commission requested additional information related to fire-emergency access, stormwater management, and tree removal mitigation during its previous preliminary review. In response, the Navy provided additional information as requested in the final project submission, detailed below.

**Fire/Emergency Access Configuration**

The expanded facility's fire/emergency access (encompassing the new range Building A and to the south) is designed per Unified Facilities Criteria 3-600-01, which requires an all-weather fire lane to within 33-feet of all exterior doors. Plans show Building A with exterior doors on its east-facing side, requiring the new access drive to wrap around the building's north- and east-sides. Also, new Building B will have exterior doors on its south-facing side, thereby requiring the drive to continue further south of Building A (new indoor firing range) to meet the 33-foot proximity requirement. The new roadway will connect to the existing access along the eastside of the open-air range facility.

**Maryland Department of Environment and EISA Section 438 Compliance**

The applicant provided summary reports to verify compliance with applicable Maryland and EISA, Section 438 standards. The project requires 23,120 cubic feet of total runoff volume capacity, and the new design will provide an ample 34,820 cubic feet of capacity, significantly exceeding the requirement to account for greater future rainfall. The project will meet State and federal requirements including total runoff volume, treatment of the 10-year storm event, and treatment of the required recharge volume. Additionally, submitted documentation shows that the design will meet Maryland requirements for Low Impact Development (LID) management, with a combination of bioretention areas and stone dry wells.

**Project Disturbance**

The applicant considered permeable paving materials (asphalt, concrete, pavers) to potentially reduce the footprint of the expanded facility (thereby reducing total tree removal area); however, Joint Base Andrews does not allow porous materials due to durability and maintenance concerns. Permeable paving requires more intensive maintenance and snow removal practices that are beyond the current capability of the installation.

**Tree Removal Mitigation**

The JBA Arbor Plan is intended to create an urban forest through strategic tree planting priority areas, establishing a diverse mix of tree species and sizes, and tree replacement at a viable ratio. The proposed tree removal mitigation is based on these considerations, with replacement allocated at 60% of the total tree canopy removal area, within priority planting areas near the JBA headquarters building. The proposed 250 new trees will include eight different species, with 45 "pioneer" canopy trees, 25 "climax" hardwood canopy trees, 95 understory trees, and 85 evergreen trees to create a healthy diversity, in addition to 70 new shrubs. The project's reforestation proposal is fully consistent with the current JBA Arbor Plan.

In light of the previous discussion, staff recommends that the Commission **note that the applicant provided additional information related to fire-emergency vehicle access, stormwater management, and tree removal mitigation to respond to the Commission's previous preliminary review request.**

## **CONFORMANCE TO EXISTING PLANS, POLICIES AND RELATED GUIDANCE**

### **Comprehensive Plan for the National Capital**

NCPC staff has reviewed this proposal for compliance with relevant guidance and has determined that it is not inconsistent with the policies established in the Federal Elements of the *Comprehensive Plan for the National Capital*. In particular, the project is supported by policies in the Federal Environment.

### **National Historic Preservation Act**

The submission includes documentation that the project was reviewed by the Maryland Historic Trust, which made the determination that there are no historic properties affected by this undertaking. For projects outside of the District of Columbia, NCPC does not have a formal Section 106 review responsibility.

### **National Environmental Policy Act**

As previously mentioned, the Air Force undertook an EA to review the project under NEPA, concluding the study with a signed Finding of No Significant Impact (FONSI.) The EA analyzed one "no build" alternative and three "build" alternatives consisting of different expansion development configurations. The Air Force's Preferred Alternative is reflected in the current project submission. For projects outside of the District of Columbia, NCPC does not have a formal review responsibility under the National Environmental Policy Act.

## **CONSULTATION**

NCPC previously transmitted the project to the Maryland Department of Planning's project referral clearinghouse, which transmitted the submission to the following agencies: Maryland Department of Natural Resources, Maryland Department of Transportation, Maryland Department of the Environment, Maryland Military Department, Prince George's County Planning Department, and the Maryland Historical Trust. There were no substantive comments transmitted back from any of the referral agencies.

## **ONLINE REFERENCE**

The following supporting documents for this project are available online at [www.ncpc.gov](http://www.ncpc.gov):

- Project Narrative

- NCPC Project Summary Presentation
- Construction Plans
- Reforestation Plan
- Stormwater Management Design Compliance Reports

Prepared by Michael Weil  
09/26/2019

**POWERPOINT (ATTACHED)**

# Joint Base Andrews Firing Range Facility Expansion

Camp Springs, Maryland

Approval of Final Site and Building Plans

United States Department of Defense

# Project Summary

**Commission Meeting Date:** October 3, 2019

**NCPC Review Authority:** 40 U.S.C. § 8722(b)(1)

**Applicant Request:** Approval of Final Site and Building Plans

**Session:** Consent Calendar

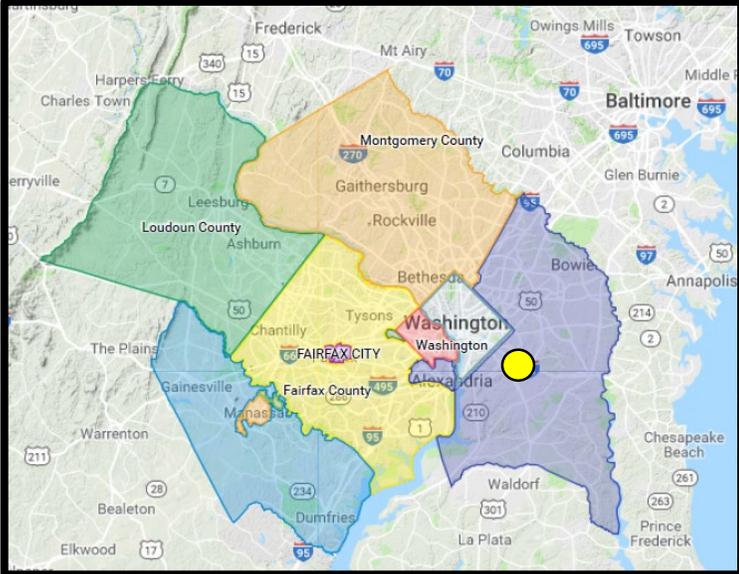
**NCPC Review Officer:** Michael Weil

**NCPC File Number:** 8056

## Project Summary:

The Naval Facilities Division has submitted a proposal to expand the existing firing range facility at Joint Base Andrews with the construction of two new buildings (known as Buildings A and B); refurbishment of an existing administrative building (known as Building C); a small addition to (and restriping of) the existing parking lot; additional on-site bio-retention areas; new sidewalks; a new loading/service drive; and additional chain-link perimeter fencing (to encompass the new expanded facility.) The existing facility includes an outdoor firing range, with a single administrative building (Building C), storage shed, on-site pedestrian walkways, stormwater management areas, surface parking (52 spaces), and chain-link perimeter fencing. The project will not increase on-site parking capacity, nor result in any increase in the number of workers at the site. The new enclosed firing range (Building A) will have an area of approximately 20,800 square feet and the new administrative building (Building B) has an area of approximately 4,300 square feet. Building C, which serves as the current administrative building for the facility, has 650 square feet of interior space.

# Site Location

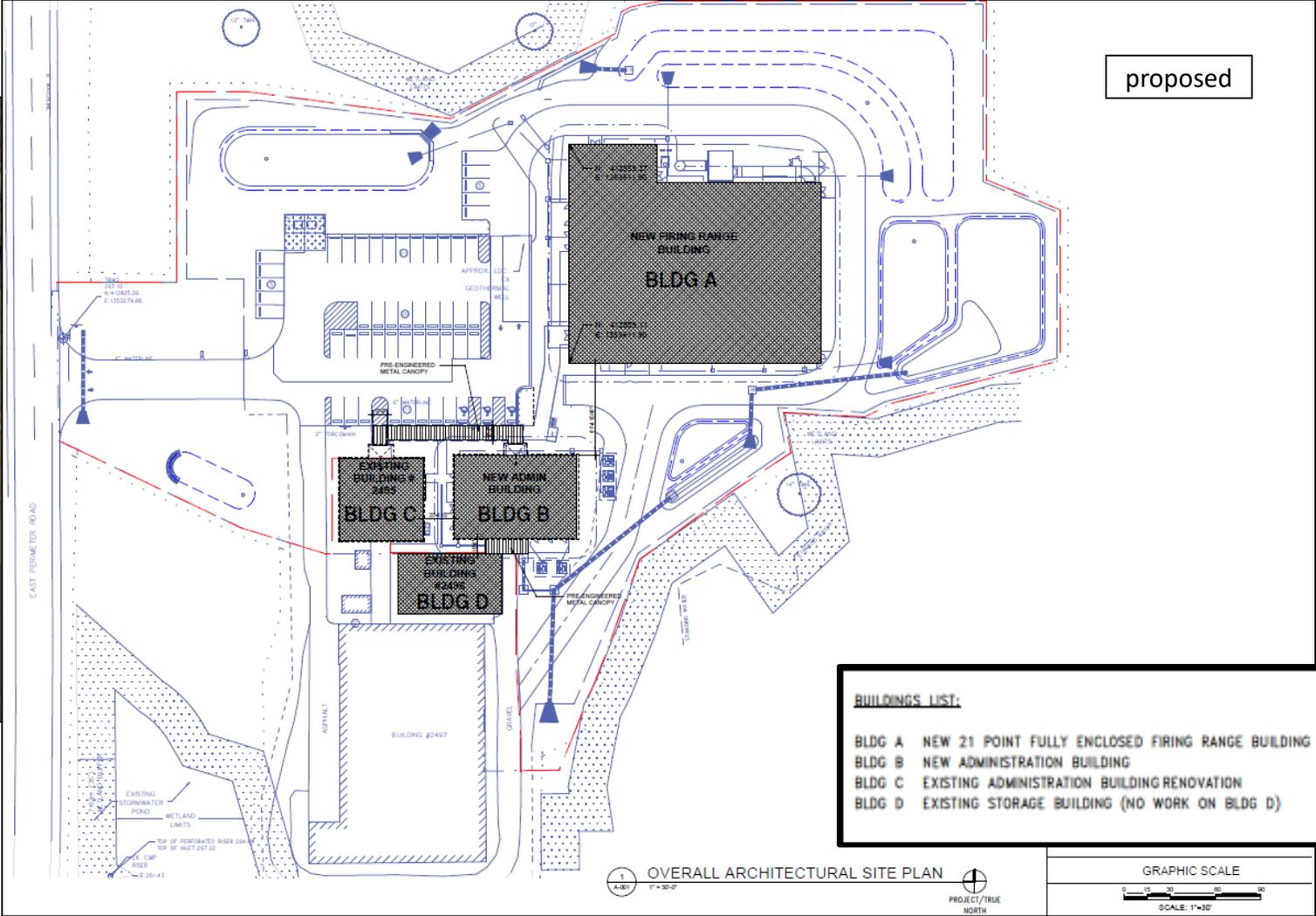


Location Map

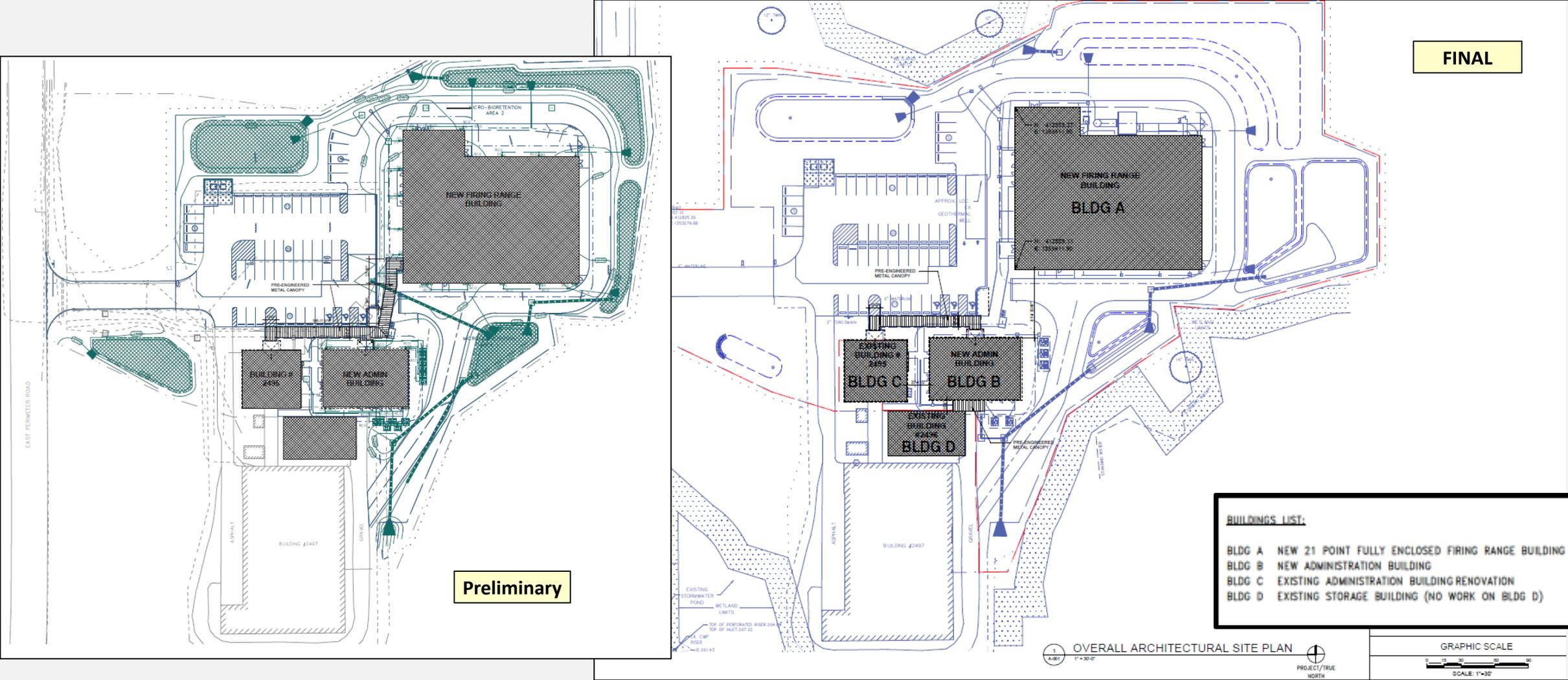
# Site Location



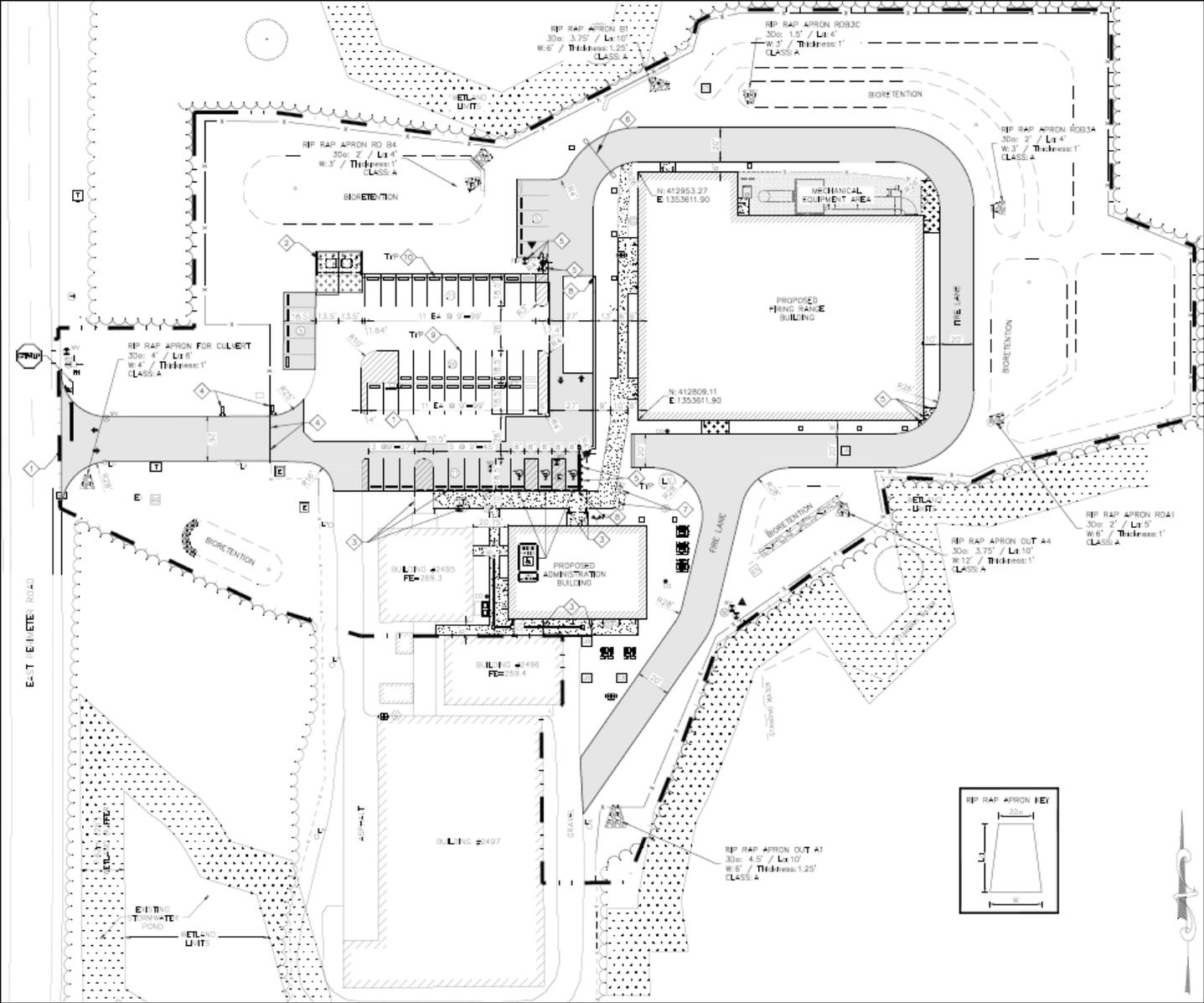
# Proposed Site Plan



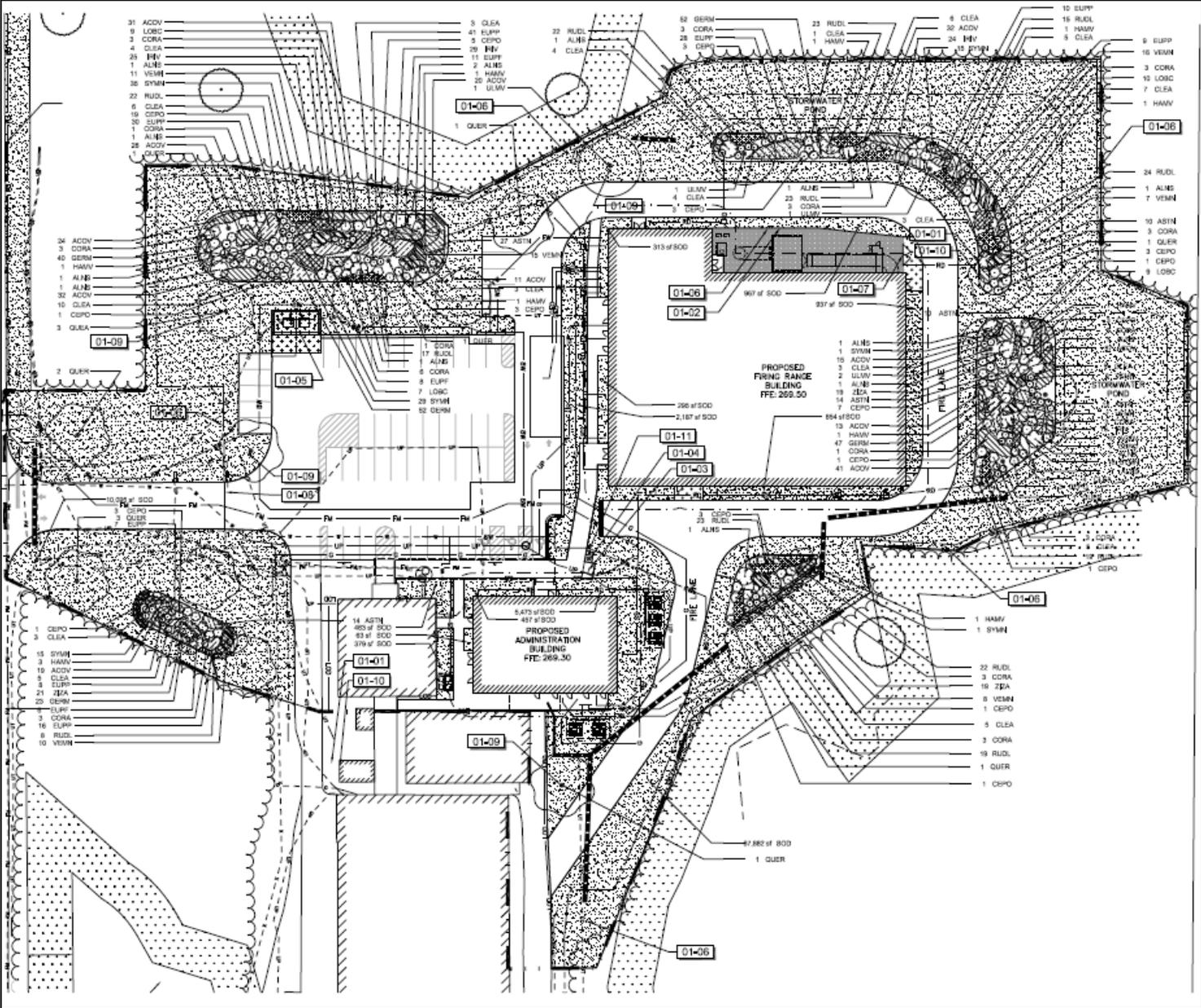
# Plan Comparison



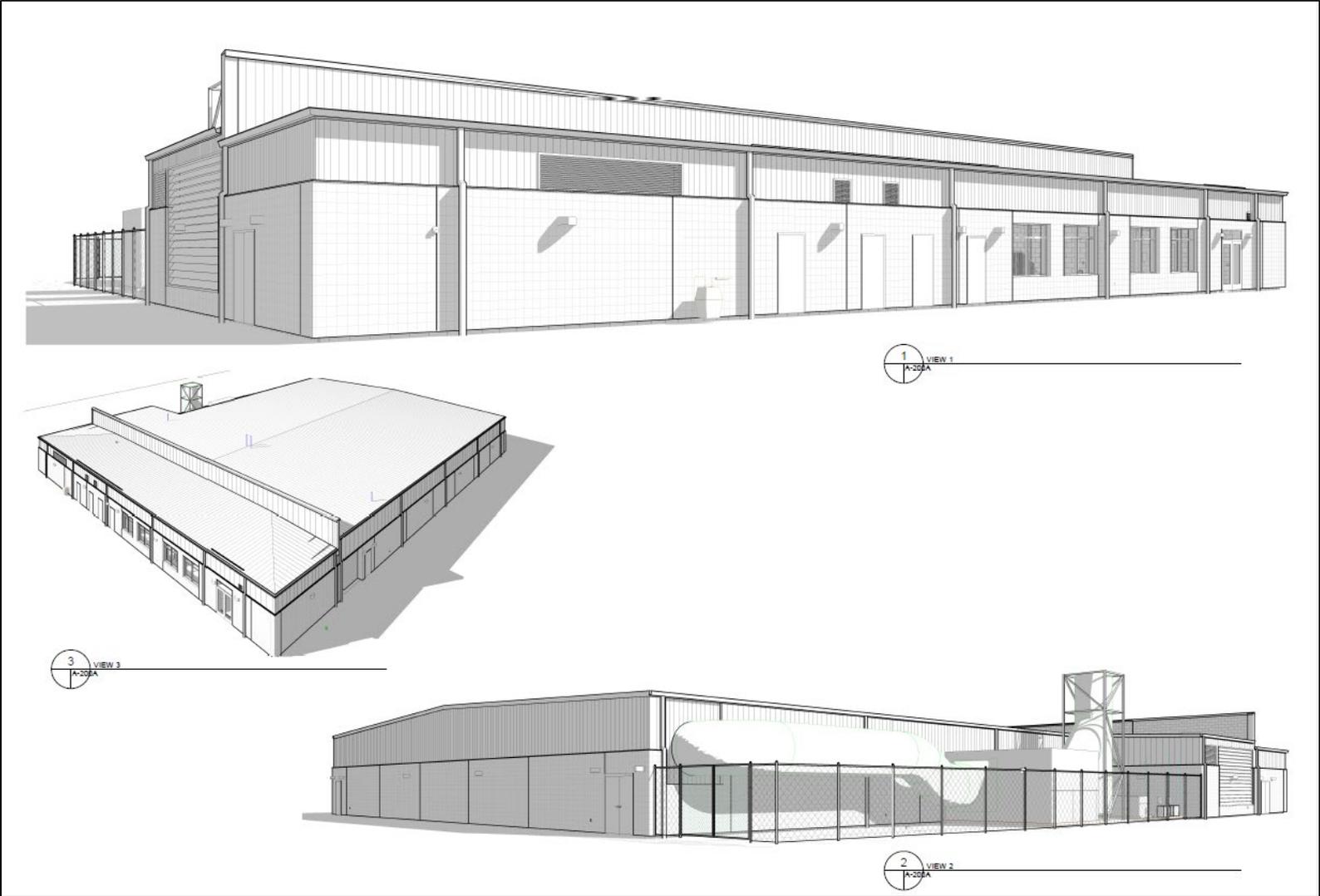
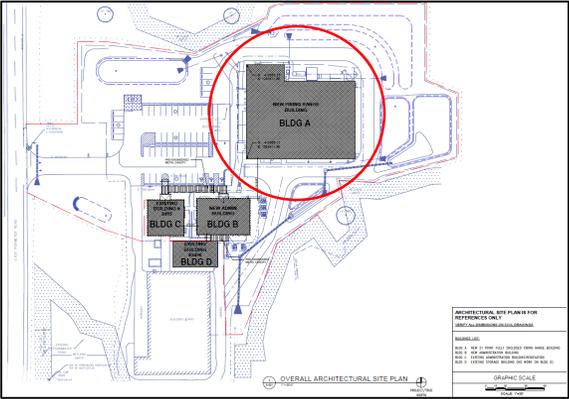
# Site Plan



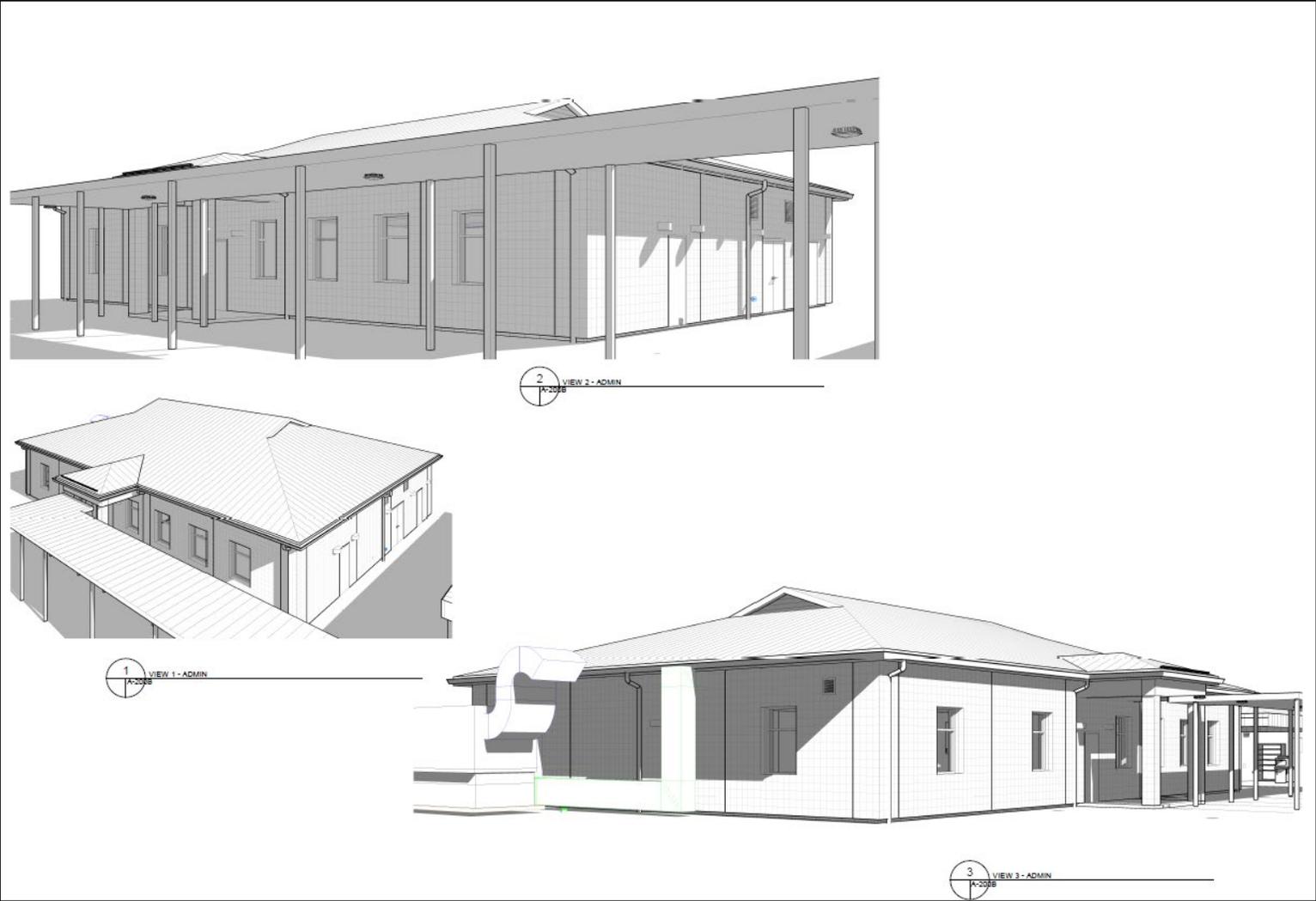
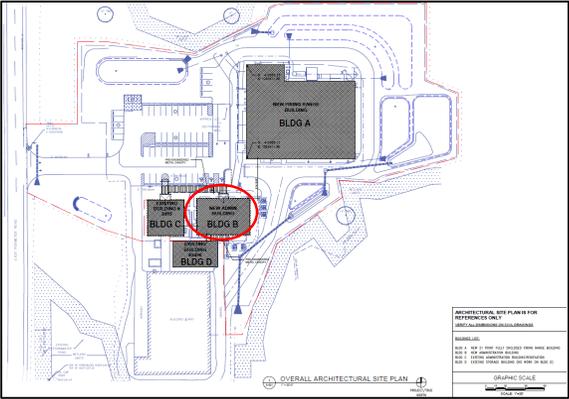
# Landscape Plan



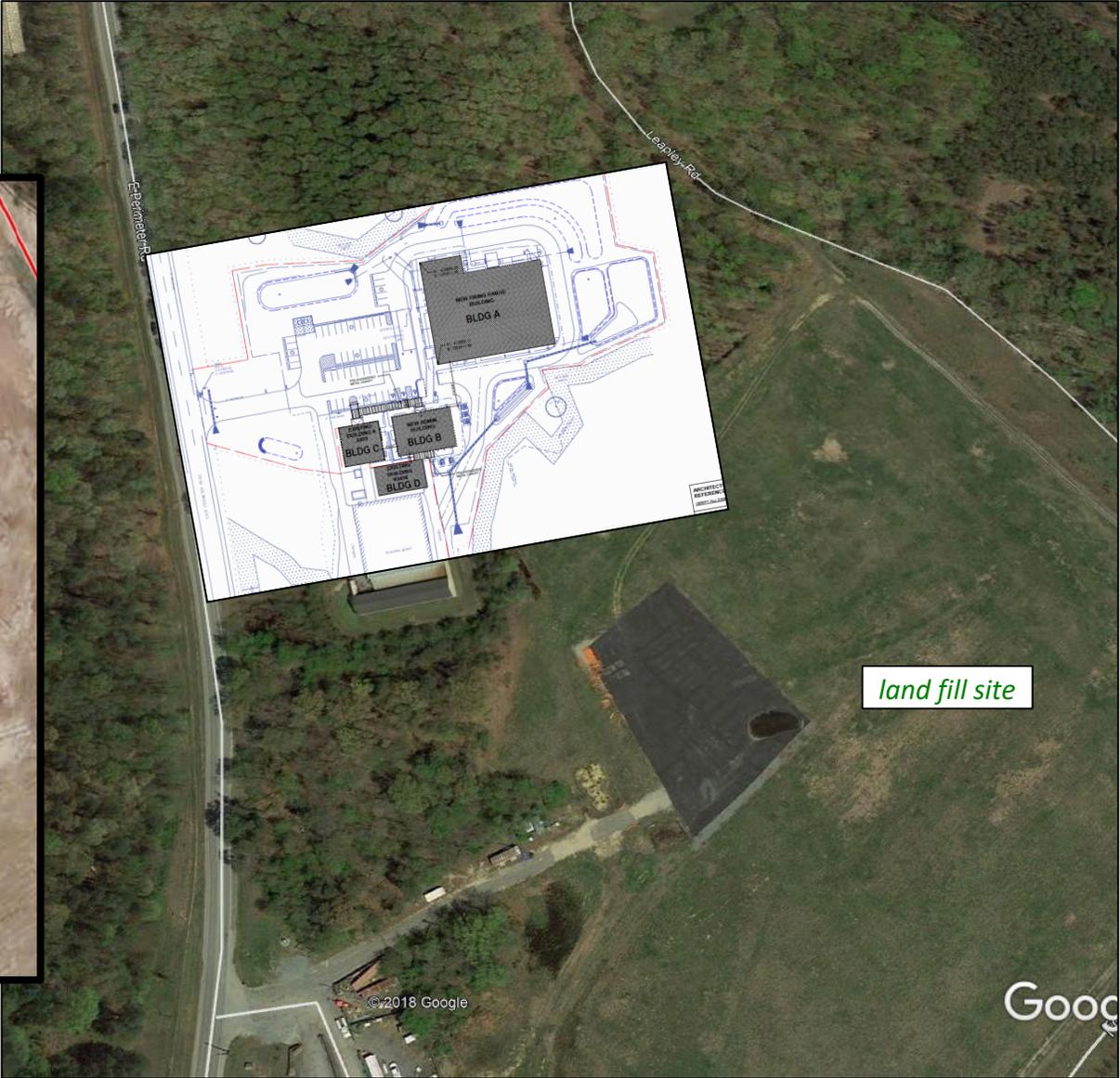
# Building A Perspectives



# Building B Perspectives



# Site Context



# Tree Removal Mitigation

## ARBOR PLAN – REFORESTATION INFORMATION

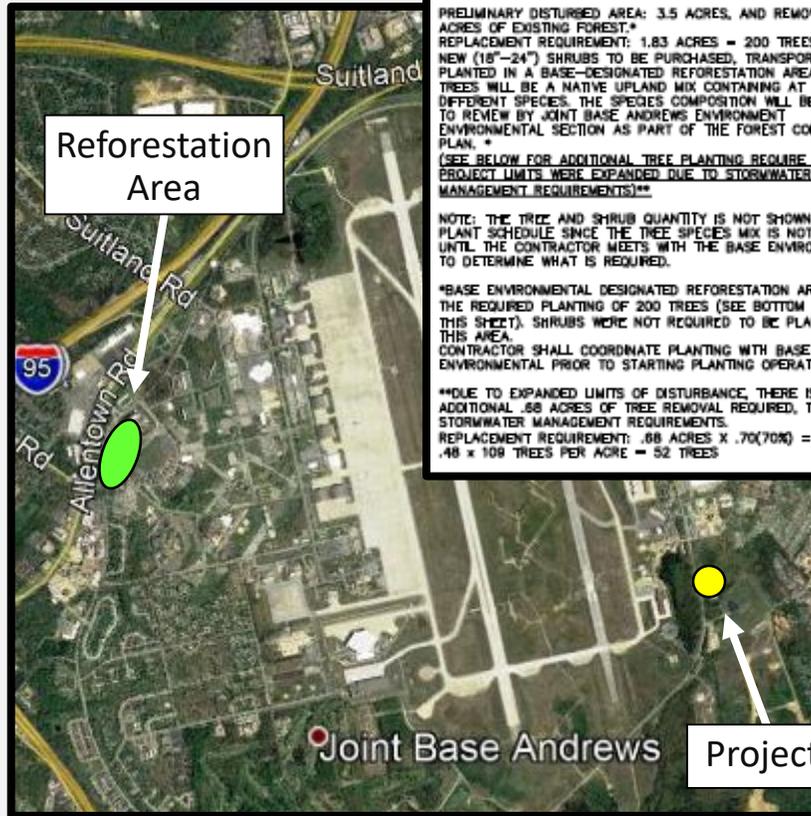
IN ACCORDANCE WITH MARYLAND DEPARTMENT OF NATURAL RESOURCES FOREST CONSERVATION LAW REQUIREMENT AND THE 2011 ANDRES/NAF ARBOR PLAN, THE REMOVAL OF EXISTING FORESTED AREA WILL REQUIRE MITIGATION BY PLANTING NEW TREES IN DESIGNATED REFORESTATION AREAS ON THE BASE. THE CONTRACTOR SHALL COORDINATE WITH BASE ENVIRONMENTAL TO CONFIRM THE LOCATION OF THE PREFERRED REFORESTATION AREA OR AREAS AS SHOWN IN THE ARBOR PLAN.

PRELIMINARY DISTURBED AREA: 3.5 ACRES, AND REMOVAL OF 2.83 ACRES OF EXISTING FOREST.  
 REPLACEMENT REQUIREMENT: 1.83 ACRES = 200 TREES AND 70 NEW (18"-24") SHRUBS TO BE PURCHASED, TRANSPORTED, AND PLANTED IN A BASE-DESIGNATED REFORESTATION AREA. THE TREES WILL BE A NATIVE UPLAND MIX CONTAINING AT LEAST 8 DIFFERENT SPECIES. THE SPECIES COMPOSITION WILL BE SUBJECT TO REVIEW BY JOINT BASE ENVIRONMENTAL SECTION AS PART OF THE FOREST CONSERVATION PLAN. \*  
 (SEE BELOW FOR ADDITIONAL TREE PLANTING REQUIRE AFTER THE PROJECT LIMITS WERE EXPANDED DUE TO STORMWATER MANAGEMENT REQUIREMENTS)\*\*

NOTE: THE TREE AND SHRUB QUANTITY IS NOT SHOWN IN THE PLANT SCHEDULE SINCE THE TREE SPECIES MIX IS NOT KNOWN UNTIL THE CONTRACTOR MEETS WITH THE BASE ENVIRONMENTAL TO DETERMINE WHAT IS REQUIRED.

\*BASE ENVIRONMENTAL DESIGNATED REFORESTATION AREA C7 FOR THE REQUIRED PLANTING OF 200 TREES (SEE BOTTOM LEFT OF THIS SHEET). SHRUBS WERE NOT REQUIRED TO BE PLANTED IN THIS AREA.  
 CONTRACTOR SHALL COORDINATE PLANTING WITH BASE ENVIRONMENTAL PRIOR TO STARTING PLANTING OPERATIONS.

\*\*DUE TO EXPANDED LIMITS OF DISTURBANCE, THERE IS AN ADDITIONAL .68 ACRES OF TREE REMOVAL REQUIRED, TO MEET STORMWATER MANAGEMENT REQUIREMENTS.  
 REPLACEMENT REQUIREMENT: .68 ACRES X .70(70%) = .48 ACRES  
 .48 X 108 TREES PER ACRE = 52 TREES



**REFORESTATION CALCULATIONS**

ACRES AVAILABLE: 34.9 AC  
 PLANTING RATE REQUIRED: 50 TREES PER 1/4 ACRE.  
 4.9 X 4 = 19.6 X 50 TREES = 980 TREES - 252 = 728 TREES (FUTURE PLANTING AVAILABLE)  
 TOTAL 100 X 100 PLANTING AREAS: 5

**100 x 100 PLANTING AREA REQUIREMENTS**

|                                       | TREE SIZES AND QUANTITIES |                |                | TOTAL | TOTAL TREE QUANTITIES |
|---------------------------------------|---------------------------|----------------|----------------|-------|-----------------------|
|                                       | 1/2" CALIPER QTY          | 1" CALIPER QTY | 2" CALIPER QTY |       |                       |
| PIONEER CANOPY                        | 3                         | 3              | 3              | 9     | x 5 = 45              |
| CLIMAX HARDWOOD CANOPY                | 2                         | 2              | 1              | 5     | x 5 = 25              |
| UNDERSTORY                            | 7                         | 7              | 5              | 19    | x 5 = 95              |
| <b>EVERGREEN SIZES AND QUANTITIES</b> |                           |                |                |       |                       |
| EVERGREEN                             | 18-24" HEIGHT             |                |                |       |                       |
|                                       | SPECIES 1                 | SPECIES 2      |                |       |                       |
|                                       | 9                         | 8              |                | 17    | x 5 = 85              |

